CADERNO DE ESPECIFICAÇÕES
DE AR CONDICIONADO

Elaborado por:

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I. APRESENTAÇÃO

UBS – Unidade Básica de Saúde é um serviço que será oferecido para comunidade da Estrutural, afim de desenvolver ações de prevenção, promoção e recuperação da saúde e conhecer a realidade da população através de diagnósticos epidemiológicos.

Trata-se de um projeto executivo de instalações de Ar Condicionado para construção das duas unidades UBS – Unidade Básica de Saúde, que serão construídas no mesmo lote, localizado na Quadra 8 AE 01, Setor Oeste – Estrutural - DF. Foram elaborados pela Minas Projetos, tendo como responsável técnico a Engenheira Mecânica Daniela De Cássia Guimarães Ohofugi - CREA: 8940/D-DF, os seguintes projetos:

1 – PROJETO PROPOSITIVO DE AR CONDICIONADO.

Em suma, adotou-se sistemas de Condicionadores de Ar do tipo Split nos ambientes que serão climatizados. Também haverá exaustão mecânica de todos os sanitários, DMLs e copas, além de sistema de renovação de ar com sistema de filtragem separado conforme a RDC nº 50, de seguindo valores de vazão de acordo com a NBR 16.401 e a NBR 7256.

Este documento tem como objetivo apresentar a descrição dos sistemas utilizados e a solução adotada para os ambientes em questão. Os materiais, equipamentos, instalação e funcionamento também serão discriminados detalhadamente.

II. SITUAÇÃO

O projeto de arquitetura para implantação da UBS da Estrutural foi desenvolvido pela equipe técnica da NOVACAP, tendo como base o programa de necessidades de uma UBS modular do Tipo II.

A proposta de implantação da UBS é em um terreno de 6.000,00 m², sendo que a edificação ocupará uma área total de 1.499,35 m² e as demais áreas para estacionamentos e área permeável.



Mapa do Brasil

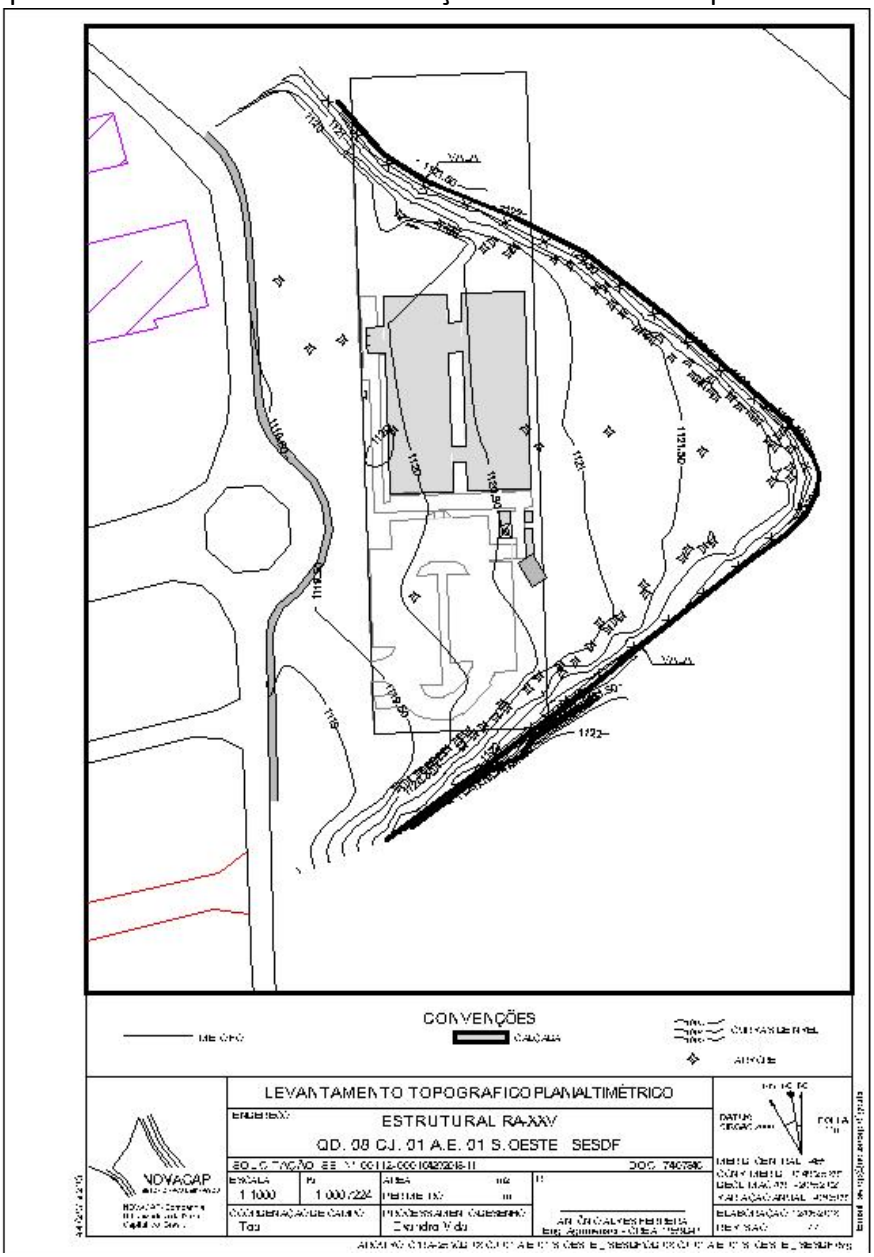


Mapa do Distrito Federal





Mapa do Setor Estrutural Localização do terreno - Geoportal



Planta de implantação fornecida pela NOVACAP.

III. MEMORIAL

O sistema de climatização(ar condicionado e ventilação mecânica) será do tipo expansão direta com a utilização de equipamentos comercialmente conhecidos como splits, estes do tipo inverter, ou seja, equipamentos que possuem compressor com rotação variável.

O desenvolvimento do projeto utilizando equipamentos inverter se deve principalmente à economia de energia que esta tecnologia proporciona, uma vez que o compressor é capaz de funcionar com a rotação variando de acordo com a alteração da carga térmica do ambiente, reduzindo o consumo de energia, evitando o liga/desliga e como consequência aumentando a vida útil dos equipamentos.

O insuflamento de ar externo será realizado por gabinetes de ar externo dotados de filtro e por rede de duto com grelhas que distribuem a vazão de ar externo para os ambientes, este sistema tem como objetivo promover a renovação de ar nos

ambientes. Os sanitários serão atendidos por mini-exaustores acionados via interruptor de luz.

O projeto do sistema de climatização da UBS será desenvolvimento de acordo com as exigências normativas da NBR 7256 (Tratamento de ar em estabelecimentos assistenciais de saúde (EAS) – Requisitos para projeto e execução das instalações) da ABNT, atendo além das especificidades técnicas, critérios de adequação e eficiência.

O projeto em epígrafe abrangerá os seguintes sistemas:

- Ar condicionado;
- Ventilação e Exaustão Mecânica.

IV. SOFTWARES UTILIZADOS

Trace 700, versão 6.3.4.0
AUTOCAD
PACOTE OFFICE

V. ETAPAS DO PROJETO

O projeto será dividido em 4 (quatro) etapas, sendo:
Etapa A – Estudo preliminar e anteprojeto;
Etapa B – Projeto básico, projeto executivo e compatibilizações.
Etapa C – Aprovações nos órgãos competentes.
Etapa D – Orçamento e planejamento de obra.

VI. NORMAS E PADRÕES

O projeto foi elaborado com base nas seguintes normas técnicas e recomendações:

- ABNT - NBR 16401 - Instalações de Ar Condicionado – Sistemas Centrais e Unitários Partes 1, 2 e 3 e complementarmente com a da ASHRAE;
- ABNT – NBR 7256 – Tratamento de ar em estabelecimentos de saúde (EAS), requisitos de projeto e execução de instalações;
- ABNT - NBR 16101 - Filtros para Partículas em Suspensão no Ar – Determinação de Eficiência para Filtros Grossos, Médios e Finos;
- ABNT – NBR 7256 – Tratamento de ar em estabelecimentos de saúde (EAS), requisitos de projeto e execução de instalações.
- ANVISA – Agência Nacional de Vigilância Sanitária - RDC 17/10, RDC 50/02;
- ANVISA - Portaria nº. 3 532 - Ministério da Saúde de 28.08.1998;
- ASHRAE - "American Society of Heating, Refrigerating and Air Conditioning Engineers";
- ASME - "American Society of Mechanical Engineers".

VII. ESPECIFICAÇÕES TÉCNICAS

7.00.00 INSTALAÇÕES MECÂNICAS E DE UTILIDADES

Todos os equipamentos especificados neste documento deverão ser fabricados utilizando as técnicas de fabricação compatíveis com as últimas edições das normas mencionadas. Na fabricação dos equipamentos deverão ser empregados materiais novos e de qualidade, cujas composição e propriedade sejam adequadas aos objetivos a que se destinam e de acordo com as melhores técnicas e práticas.

Caso, a presente especificação técnica descreva questões que possam levantar dúvidas ou tenha sido omissa em relação a algum item, será de responsabilidade da empresa Contratada entrar em contato com o projetista de forma a dirimir quaisquer questões.

7.02.000 AR CONDICIONADO

7.02.204 AR CONDICIONADO DO TIPO SPLIT

Condicionador de Ar tipo Split Inverter (ME/MC)

Gabinete

O gabinete da unidade evaporadora será construído em plástico injetável ou do tipo built-in (próprio para instalação sobre o forro e que permita dutagem)l e deverá ter peças removíveis de forma a possibilitar acesso interno aos seus componentes.

Evaporador

A serpentina será dotada de tubos e aletas de cobre sendo que o perfil destas deverá facilitar a manutenção e limpeza.

O ventilador será do tipo centrífugo e deverá permitir sua operação em três níveis de velocidade. O rotor deverá ser construído em aço galvanizado, ser dinâmica e estaticamente balanceado, acionado por motor elétrico de acionamento direto.

Condensador

Será fabricado de forma que sua serpentina tenha de 1 a 2 filas de tubos, devendo ser testado quanto à resistência mecânica e vazamentos.

O ventilador será do tipo axial com acionamento direto por motor elétrico, o qual deverá funcionar com baixo nível de ruído. A descarga do ar deverá ser do tipo horizontal.

O compressor da unidade condensadora terá rotação variável, conhecido comercialmente como inverter.

Filtro

Na unidade evaporadora deverá vir instalado filtro de ar o qual se localizará na admissão de ar de retorno. O filtro de ar deverá ser fabricado em tela lavável e permitir fácil remoção.

Rede Frigorígena

A rede frigorígena deverá ser formada por tubos de cobre sem costura e será fornecida completa com filtro de líquido, registros, conexões, sifões e acessórios necessários.

Isolamento Térmico

Todas as redes de refrigerantes (linhas de líquido e de gás – tubos de cobre), ramificações e conexões deverão ser isoladas termicamente e individualmente com isolante de célula fechada no mínimo de 19 mm de espessura. O isolante deverá ter uma resistência térmica acima de 100 °C, visto que a temperatura da tubulação de gás é elevada e será do tipo antichama. A espessura das paredes dos tubos deverá obedecer aos critérios do fabricante das unidades condicionadoras.

O isolamento das linhas deverá ser realizado conforme detalhe que consta nos desenhos do projeto. Caso necessário, deverá ser instalada uma barreia de vapor com filme de alumínio para evitar absorção de umidade pelo isolante térmico.
As linhas que correm ao ar livre deverão ser revestidas com fita aluminizada externamente ao isolamento térmico, a fim de proteger a integridade do isolante contra os raios solares e intempéries.

Controle Remoto

O equipamento será comandado através de controle remoto preferencialmente com fio com display de cristal líquido, o qual terá capacidade de selecionar uma das três velocidades do ventilador, timer 24 horas para pré-determinar horário de funcionamento, função repouso, e acionamento do controle automático de direcionamento do insuflamento de ar.

Gabinete de Ar Externo (GE)

O ventilador possuirá rotor com pás curvadas para trás (limit), dupla aspiração, com base fixa e acionamento através de polias e correia. O rotor do ventilador será balanceado estática e dinamicamente, operando sobre mancais auto-alinhantes (do tipo rolamentos auto-compensadores), auto-lubrificantes e blindados. O eixo será fabricado em aço, com um rasgo de chaveta para colocação de polias, trabalhando apoiado em dois mancais. Os suportes dos mancais serão em chapa grossa de aço, ligados ao gabinete por estrutura, formando um conjunto rígido.

Toda a superfície do ventilador terá proteção contra a corrosão, com pintura adequada a sua operação, com a secagem em estufa.

O ventilador será acionado por motor à prova de respingos através de polias e correias. O motor será do tipo assíncrono trifásico, classe B e operará com uma tensão de 380V, 60Hz.

O gabinete de ventilação será fornecido com gaveta do tipo porta filtro e filtro do tipo G4, segundo classificação da ABNT. A conexão do gabinete com o duto deverá ser flangeada e aparafusada com o uso de elementos flexíveis.

Mini Exaustor (MEX)

Será construído em material plástico e deverá operar com temperatura de até 40°C.O motor deverá possuir nível de proteção IP 45, classe II e alimentação 220V, monofásico a 60 Hz. Será provido de válvula anti-retorno de forma evitar a entrada do ar quando não estiver em funcionamento e garantir que seu nível de pressão sonora não exceda 40 dB(A) medidos a 1,5 m de distância.

07.02.500 EQUIPAMENTOS AUXILIARES
07.02.510 CONEXÕES

Curvas e Joelhos

O raio de curvatura de linha de centro de todas as curvas e joelhos não deverá ser menor do que 1,25 vez a dimensão, no sentido da curva, do trecho de duto. Onde houver a interferência que impossibilite o uso deste raio mínimo será permitida a montagem de joelhos reta.

Veias Direcionais

Todas as curvas e joelhos deverão possuir veias direcionais. Estas deverão ser construídas do mesmo material dos dutos, de acordo com as diretrizes da SMACNA e não deverão ser fabricadas com espessura inferior à bitola de # 22. Deverão ser do tipo de dupla chapa.

07.04.000 - SISTEMA DE VENTILAÇÃO MECÂNICA
07.04.301 – RENOVAÇÃO DE AR

Grelhas de Insuflamento e Retorno

Serão construídas em perfil de alumínio extrudado, anodizado, na cor natural. Possuirão aletas horizontais ajustáveis individualmente e seu registro será de dupla deflexão com lâminas convergentes.

Grelhas de Porta

Serão construídas com perfis de alumínio extrudado, anodizado, na cor natural que possuirá aletas horizontais fixas em V e dupla moldura.

Registros para Regulagem do Ar

Deverão ser executados em chapa de aço galvanizado, do tipo de lâminas paralelas, a fim de permitir o balanceamento da vazão.

Janelas de Inspeção

As portas de inspeção deverão ser fabricadas do mesmo material do duto, sendo localizadas, preferencialmente, na lateral do mesmo, prevendo distância, entre a face inferior da porta de inspeção e a face inferior do duto, não inferior a 0,05 m e providas de juntas que assegurem vedação e incombustibilidade. No caso da existência de forros ou vigas falsas encobrindo os dutos, aqueles deverão ser providos de alçapões que possibilitem acesso pleno às portas de inspeção.

07.02.300 - REDE DE DUTOS
07.02.301 - DUTOS

Os dutos deverão ser cuidadosamente fabricados e montados, de modo a se obter uma construção rígida, sólida, limpa, sem saliências, cantos vivos, arestas cortantes e vazamentos excessivos.

Fabricação e montagem

Os dutos deverão ser executados segundo as diretrizes emanadas da Norma Brasileira NBR-16401 e da SMACNA INC (Sheet Metal and Constructors National Association INC), para dutos de baixa velocidade, contidas no Manual HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE.

Transições em dutos, inclusive conexões entre equipamentos e dutos, deverão ter uma conicidade não maior que 20° em ambos os planos. Os dutos deverão ser executados em chapa de aço galvanizado, com as espessuras indicadas na NBR-16401.

Os dutos deverão ser construídos em aço galvanizado, com bitola mínima 24 e como as espessuras indicadas na NBR-14518 e ser flangeados, utilizando união transversal TDC.

Os dutos deverão ser aterrados à carcaça do equipamento com cordoalha de cobre nu, de seção de 16 mm2, fixada com parafusos de aço e arruelas bimetálicas.

O máximo cuidado deverá ser tomado durante a montagem para manter limpa a superfície interna dos dutos, os quais deverão ser fabricados em ambiente limpo e cuidadosamente higienizados internamente, tampados dos dois lados e levados ao local de montagem onde serão abertos de um lado e conectados ao trecho já instalado.

Elementos de suspensão e suporte

Cada elemento de duto deverá ser suspenso ou suportado, de maneira independente e diretamente à estrutura da edificação mais próxima, sem conexão com os outros elementos já sustentados.

A sustentação dos dutos deve ser feita por perfilados metálicos dimensionados para atender às necessidades estruturais e de operação de limpeza dos mesmos.

Serão fixados aos dutos e às estruturas mais próximas, através de parafusos, arruelas, porcas ou outros elementos de fixação, executados em aço galvanizado.

Deverão obedecer aos critérios de espaçamento previstos nas normas e regulamentos citados.

Os dutos não deverão ter contato com paredes. Assim, onde houver passagem de dutos através de paredes, as bordas do furo na parede deverão ser requadradas com peças de madeira devidamente tratadas e o duto será isolado destas peças através de vedação por um elemento elastômero.

Conexões Flexíveis para Dutos

As conexões dos equipamentos aos dutos deverão ser flangeadas e aparafusadas com o uso de elementos flexíveis. O material da conexão flexível deve ser incombustível e estanque a líquidos na superfície interna e com características mecânicas próprias para operar em equipamento dinâmico. Suas emendas longitudinais, além de estanques, devem ser transpassadas. O material empregado deve propiciar no mínimo uma resistência ao fogo de 1 h.

VIII. PROCESSO EXECUTIVO

A) ESPECIFICAÇÃO TÉCNICA DO SISTEMA

O sistema de climatização no tocante às responsabilidades da empresa Contratada deverá atender os seguintes itens:

- fornecimento dos equipamentos indicados em projeto obedecendo às características técnicas descritas neste documento;
- fixação de todos os equipamentos, instalação das redes frigorígena e de dutos, elétrica e de dreno e demais elementos, além de utilizar os dispositivos corretos para cada tipo de instalação, tais como: tirantes, suportes, bases de equipamentos, conexões e suportes flexíveis;
- verificação dos pontos elétricos fornecidos pela Contratada, observadas as proteções necessárias às sobrecargas e ao risco de curto circuito;
- interligação dos equipamentos até o ponto de força disponibilizado pela Contratante;

- interligação dos drenos das evaporadoras até o ponto de descarga;

- toda obra civil necessária à instalação dos sistemas de ar condicionado e ventilação, tais como execução de furos em alvenaria com serra copo, concreto e forro;

- embalagem e transporte adequados dos equipamentos e acessórios até a obra.

B) DADOS / PARÂMETROS TÉCNICOS

Cidade	Brasília
Altitude	1.050
Latitude	15,77 S
Longitude	47,93 W
Temperatura de bulbo seco	32,5 °C
Temperatura de bulbo úmido	23,5 °C

Dados referentes ao arquivo climático da cidade de Brasília fornecido pelo Solar and Wind Energy Resource Assessment (SWERA), juntamente com o INPE (Instituto Nacional de Pesquisas Espaciais) e LABSOLAR/UFSC (Laboratório Solar) da Universidade Federal de Santa Catarina.

Características do Envelope da Edificação

- Tipo de vidro considerado: laminado de 8 mm
- Coeficiente global de transferência de calor do vidro: 5,7W/m²ºC
- Coeficiente global de transferência de calor das paredes: 1,96 W/m²ºC
- Coeficiente global de transferência de calor da laje: 1,30 W/m²ºC
- Coeficiente global de transferência de calor do telhado: 1,52 W/m²ºC
- Coeficiente de sombreamento: 0,51
- Direção das paredes externas: conforme projeto de arquitetura

C) CONDIÇÕES TÉCNICAS

D) Temperatura de bulco seco	24,0 °C ± 2,0 °C
Umidade relativa	Flutuante

E) PREMISSAS DE CÁLCULO

1. Ambientes Atendidos

- Espera/Recepção Módulo 01

- Farmácia
- Sala Acolhimento 01
- Salas Acolhimento 02 a 04
- Consultório Indif. 01 a 04
- Sala ACS
- Sala Imunização
- Sala Medicação
- Sala Inalação Coletiva
- Sala de Coleta
- Sala de Curativos
- Sala de Procedimentos
- Área Técnica CPD módulo 01
- Educação em Saúde
- Sala Nasf
- Consultórios 01 a 06
- Área Técnica CPD módulo 02
- Almoxarifado
- Sala de Esterilização/Descontaminação
- Consultórios Odontológicos 01 a 04
- Sala de Reunião Equipe/Multiuso
- Sala Administrativa
- Espera/Recepção Módulo 02

2. Taxa de Ocupação

- Espera/Recepção Módulo 01	19 pessoas
- Farmácia	04 pessoas
- Sala Acolhimento 01	03 pessoas
- Salas Acolhimento 02 a 04	03 pessoas/sala
- Consultório Indif. 01 a 04	03 pessoas/consult.
- Sala ACS	08 pessoas
- Sala Imunização	05 pessoas
- Sala Medicação	06 pessoas
- Sala Inalação Coletiva	11 pessoas
- Sala de Coleta	03 pessoas
- Sala de Curativos	04 pessoas
- Sala de Procedimentos	04 pessoas
- Área Técnica CPD módulo 01	01 pessoa
- Educação em Saúde	31 pessoas
- Sala Nasf	03 pessoas
- Consultórios 01 a 06	03 pessoas/consult.
- Área Técnica CPD módulo 02	01 pessoas
- Almoxarifado	02 pessoas
- Sala de Esterilização/Descontaminação	02 pessoas
- Consultórios Odontológicos 01 a 04	03 pessoas/consult.
- Sala de Reunião Equipe/Multiuso	16 pessoas
- Sala Administrativa	07 pessoas

- Espera/Recepção Módulo 02 43 pessoas

3. Taxa de Iluminação

- Todos os ambientes 22,0 Watts/m^2

4. Taxa de Dissipação dos Equipamentos

Ambiente	Disspação (W)	Equipamentos	Valores Equips(W)
Espera/Recepção Módulo 01	270	Monitor+comput.	2 x (65+70)
Farmácia	1345	Monitor+comput. +impressora+ geladeiras	3 x (65+70)+320 + 2 x (310)
Sala Acolhimento 01	135	Monitor+comput.	1 x (65+70)
Salas Acolhimento 02 a 04	135	Monitor+comput.	1 x (65+70)
Consultório Indif. 01 a 04	135	Monitor+comput.	1 x (65+70)
Sala ACS	1400	Monitor+comput. +impressora	8 x (65 +70) + 320
Sala Imunização	135	Monitor+comput.	1 x (65+70)
Sala Medicação	135	Monitor+comput.	1 x (65+70)
Sala Inalação Coletiva	-	-	-
Sala de Coleta	135	Monitor+comput.	1 x (65+70)
Sala de Curativos	135	Monitor+comput.	1 x (65+70)
Sala de Procedimentos	135	Monitor+comput.	1 x (65+70)
Área Técnica CPD módulo 01	2000	Servidores	460/m^2
Educação em Saúde	485	Monitor+comput. + projetor	1 x (65+70) + 350
Sala Nasf	135	Monitor+comput.	1 x (65+70)
Consultórios 01 a 06	135	Monitor+comput.	1 x (65+70)
Área Técnica CPD módulo 02	2000	Servidores	460/m^2
Almoxarifado	-	-	-
Sala de Esterilização/Descontaminação	1600	Autoclave de bancada	2 x (700)
Consultórios Odontológicos 01 a 04	263	Motor cadeira	1 x (263)
Sala de Reunião Equipe/Multiuso	135	Monitor+comput.	1 x (65+70)
Sala Administrativa	1265	Monitor+comput. +impressora	7 x (65 +70) + 320
Espera/Recepção Módulo 02	270	Monitor+comput.	2 x (65+70)

5. Taxa de Renovação de Ar – Ambientes Climatizados

- Espera/Recepção Módulo 01	510 m^3/h
- Farmácia	230 m^3/h
- Sala Acolhimento 01	80 m^3/h
- Salas Acolhimento 02 a 04	80 m^3/h/sala
- Consultório Indif. 01 a 04	80 m^3/h/consult.
- Sala ACS	220 m^3/h
- Sala Imunização	130 m^3/h
- Sala Medicação	160 m^3/h
- Sala Inalação Coletiva	300 m^3/h
- Sala de Coleta	90 m^3/h
- Sala de Curativos	110 m^3/h
- Sala de Procedimentos	110 m^3/h
- Área Técnica CPD módulo 01	50 m^3/h
- Educação em Saúde	830 m^3/h
- Sala Nasf	80 m^3/h
- Consultórios 01 a 06	80 m^3/h/consult.
- Área Técnica CPD módulo 02	50 m^3/h
- Sala de Esterilização/Descontaminação	200 m^3/h
- Consultórios Odontológicos 01 a 04	80 m^3/h/consult.
- Sala de Reunião Equipe/Multiuso	330 m^3/h
- Sala Administrativa	190 m^3/h
- Espera/Recepção Módulo 02	1160 m^3/h

6. Taxa de Renovação de Ar – Ambientes Não Climatizados

- Copa	260 m3/h
- Rouparia	130 m3/h
- WC Feminino	390 m3/h
- WC Masculino	390 m3/h
- WC PNE	260 m3/h
- DML	130 m3/h
- Depósito de Equipamentos	130 m3/h
- Fraldário	260 m3/h
- Expurgo	580 m3/h
- Vestiário Feminino	780 m3/h
- Vestiário Masculino	780 m3/h

7. Grau de Filtragem e Nível de Pressão

- Ar Exterior	G4 + M5
- Sala de Inalação Coletiva	G4
- Sala de Esterilização/Descontaminação	G4 e Pressão (+) de 200 m3/h
- Demais Ambientes	G1

F) MEMÓRIA DE CÁLCULO / DIMENSIONAMENTO

1. Método de Cálculo

O pico de carga térmica para a edificação é de 158,5 kW (45,0 TR) e ocorre às 17 horas do mês de dezembro. O cálculo da carga térmica foi realizado através do software Trace 700, versão 6.3.4.0, o qual se utilizada de métodos preconizados pela ASHRAE.

Ambiente	Carga Térmica Total (kW)	Carga Térmica Sensivel (kW)
Espera/Recepção Módulo 01	13,15	10,12
Farmácia	8,48	7,31
Sala Acolhimento 01	3,25	2,83
Salas Acolhimento 02 a 04	3,04	2,62
Consultório Indif. 01 a 04	3,02	2,60
Sala ACS	8,21	6,87
Sala Imunização	2,81	1,66
Sala Medicação	2,75	1,73
Sala Inalação Coletiva	5,06	3,16
Sala de Coleta	1,98	1,45
Sala de Curativos	2,11	1,42
Sala de Procedimentos	2,23	1,54
Área Técnica CPD módulo 01	2,96	2,66
Educação em Saúde	13,26	8,06
Sala Nasf	3,17	2,75
Consultórios 01 a 06	3,07	2,65
Área Técnica CPD módulo 02	3,10	2,81
Almoxarifado	5,07	4,62
Sala de Esterilização/Desc.	3,99	2,76
Consultórios Odonts 01 a 04	2,09	1,63
Sala de Reunião Equipe/Multiuso	5,71	3,62
Sala Administrativa	5,26	4,19
Espera/Recepção Módulo 02	19,95	13,12

2. TABELA DE SELEÇÃO DE EQUIPAMENTOS

Ambiente	Carga Térmica Total (Btu/h)	Capacidade Nominal. Equip.(Btu/h)
Espera/Recepção Módulo 01	44.830	2 x 30.000
Farmácia	28.909	30.000
Sala Acolhimento 01	11.080	12.000
Salas Acolhimento 02 a 04	10.364	12.000
Consultório Indif. 01 a 04	10.295	12.000
Sala ACS	27.998	2 x 18.000

Sala Imunização	9.590	12.000
Sala Medicação	9.375	12.000
Sala Inalação Coletiva	17.250	18.000
Sala de Coleta	6.750	9.000
Ambiente	**Carga Térmica Total (Btu/h)**	**Capacidade Nominal Equipamento (Btu/h)**
Sala de Curativos	7.193	9.000
Sala de Procedimentos	7.602	9.000
Área Técnica CPD módulo 01	10.090	12.000
Educação em Saúde	45.204	48.000
Sala Nasf	10.806	12.000
Consultórios 01 a 06	10.465	12.000
Área Técnica CPD módulo 02	10.568	12.000
Almoxarifado	17.284	2 x 9.000
Sala de Esterilização/Desc.	13.602	18.000
Consultórios Odonts 01 a 04	7.125	9.000
Sala de Reunião Equipe/Multiuso	19.466	2 x 12.000
Sala Administrativa	17.932	2 x 9.000
Espera/Recepção Módulo 02	68.011	2 x 36.000

G) TESTES / ENSAIOS A SEREM REALIZADOS:

Todos os equipamentos serão inspecionados e testados, além de testadas e inspecionadas as redes de ar (dutos), elétrica e de drenagem. A Contratada obriga-se a providenciar pessoal especializado, ferramentas e todos os demais itens necessários à realização desses testes.

Os testes e ensaios serão norteados pelas normas correspondentes, bem como verificadas todas as características de funcionamento exigidas nas especificações técnicas descritas nos catálogos dos equipamentos ou de seus componentes. Deverá ser verificado se todos os componentes (mecânicos ou elétricos) dos equipamentos trabalham nas condições normais de operação, definidas nos documentos ou em normas técnicas aplicáveis.

Faz parte do escopo de serviços da Contratada a realização de testes e inspeções nas redes de dutos, na rede de drenagem, na instalação elétrica e nos equipamentos e componentes do sistema. Estas operações deverão ser realizadas por mão de obra especializada e contará com todas as ferramentas específicas para consecução das tarefas.

As operações de inspeção e teste deverão verificar as características de funcionamento exigidas nas especificações técnicas e nos catálogos técnicos dos fabricantes dos equipamentos. Será verificado se todos os componentes (mecânicos ou elétricos) dos equipamentos trabalham nas condições normais de operação, definidas naqueles documentos ou em normas técnicas aplicáveis.

Todos os instrumentos a serem utilizados nos testes e balanceamento do sistema deverão estar calibrados e aferidos.

H) PROCEDIMENTOS DE OPERAÇÃO E MANUTENÇÃO

É de responsabilidade da Contratada executar a pré-operação da instalação de ar condicionado e ventilação, na presença do fiscal designado pela Contratante com o intuito de avaliar a performance do sistema implantado.

Na pré-operação do sistema deverá ser assegurado que todos os materiais, equipamentos e ferramentas necessários à condução da atividade estejam disponíveis e instalados. Após encerrada a pré-operação, todos defeitos que foram deverão ser corrigidos pela Contratada.

Antes da pré-operação, a Contratada realizará a limpeza da instalação, garantido a realização dos seguintes serviços:

- limpeza dos equipamentos;
- remoção de qualquer vestígio de cimento, reboco ou outros materiais; graxas e manchas de óleo remover com solvente adequado;
- limpeza com escova metálica de todos os vestígios de ferrugem ou de outras manchas;
- limpeza de toda a rede de dutos por meio de uso dos próprios ventiladores do sistema ou por jato de ar comprimido, até que se comprove a não existência de sujeira no interior da mesma.

IX. DIRETRIZES PARA TRANSPORTE E GUARDA DE MATERIAL EM GERAL

Caberá a empresa Contratada o transporte de todos os equipamentos e materiais até o canteiro da obra, em local designado pela Contratante.

Na proposta apresentada à Contratante, a empresa Contratada deverá prever todos os custos relacionados ao transporte até os pontos de instalação indicados em projeto, tais como: equipamentos de elevação, dispositivos de locomoção dentro da obra, mão de obra e operação de supervisão. Deverão também ser considerados na proposta todos os seguros aplicáveis às operações de transporte dos equipamentos.

Todos os equipamentos e materiais que compõem o sistema de climatização deverão ser armazenados em local próprio, seguro e abrigado, sendo de responsabilidade da Contratada a guarda dos mesmos.

X. CONDIÇÕES PARA RECEBIMENTO DOS SERVIÇOS

Realizadas e aprovadas as atividades de montagem, testes e pré-operação da instalação, de seus equipamentos e demais itens que integram os sistemas de ar condicionado e ventilação dentro dos parâmetros assumidos, será emitido pela Contratante, o termo de recebimento da obra.

XI. GARANTIA

A Contratada assegurará à Contratante garantia de 12 (doze) meses em todos os acessórios e materiais utilizados nos sistemas de climatização e ventilação, além de se responsabilizar por igual período pelo funcionamento adequado da instalação implantada.

Essa garantia cobre os defeitos de funcionamento das peças e componentes dos acessórios e materiais descritos nas condições normais de uso – de acordo com as instruções dos manuais de instalação/operação que acompanham os mesmos, e que são fornecidos pelos fabricantes.

Será garantida à Contratante a substituição ou reparação gratuita de qualquer componente reconhecidamente defeituoso e dos serviços de mão-de-obra necessários.

A garantia será contada a partir do termo de recebimento da obra a ser emitido pela Contratante.

XII. PROJETO COMO CONSTRUIDO (AS-BUILT)

A instalação de climatização deverá ser o projeto o mais fielmente possível, havendo necessidade de alguma alteração, essa deverá ser comunicada ao fiscal da obra e submetida a sua aprovação.

Caberá à Contratada o fornecimento de 02 (dois) jogos completos de plantas com o as-built da instalação.



DANIELA DE CÁSSIA GUIMARÃES OHOFUGI

CREA: 8940/D-DF

ANEXOS

ANEXO I – FICHAS TÉCNICAS DOS EQUIPAMENTOS

Ficha de Características Técnicas – Módulos Evaporador e Condensador (Split Inverter)			
Nomenclatura: ME/MC-15, ME/MC-16, ME/MC-17, ME/MC-29A, ME/MC-29B,, ME/MC-31, ME/MC-32, ME/MC-33, ME/MC-34, ME/MC-36A e ME/MC-36B		**Quant.: 11**	
Ambientes: Sl. De Coleta, Sl. De Procedimentos, Sl. De Curativos, Almoxarifado, Consult. Odonts. 01 a 04 e Sala Administrativa			
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Capacidade nominal	9.000	Btu/h
2	TBS do ar	32,0	ºC
3	Vazão de ar evaporadora	497	m^3/h
4	Ponto de Força	0,814	W
5	Alimentação elétrica	220-1-60Hz	V-f-Hz
6	Diâmetro tubulações (linhas líquido e gás)	1/4 e 3/8	Poleg.
7	Peso da Evaporadora /Condensador	7,3/19,0	Kgf
8	Dimensões da Evaporadora e Condensadora (A x L x P)	285x720x204 557x442x395	mm
9	Gás refrigerante	R-410 A	
10	Tipo de gabinete	Hi-Wall (parede)	
11	Fabricante de referência	Springer Midea	
12	Modelo da evaporadora/condensadora	42MACA09S5/38KXC09S5	
13	Acessório	Controle remoto com fio	
14	Filtro (segundo classificação da ABNT)	G1	
Observações:			
1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial.			
2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.			

Ficha de Características Técnicas – Módulos Evaporador e Condensador (Split Inverter)			
Nomenclatura: ME/MC-03 a ME/MC-13, ME/MC-18 e ME/MC-21 a ME/MC-28, ME/MC-35A e ME/MC-35B		**Quant.: 21**	
Ambientes: Sl. De Acolhimento 01 a 04, Consult. Indif. 01 a 04, Sl. De Imuniz., Sl. De Medicação, Áreas Técnicas de CPD 1 e 2, Sl. Nasf, Consults. 01 a 06 e Sala de Reuniões Equipe/Sala Multiuso			
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Capacidade nominal	12.000	Btu/h
2	TBS do ar	32,0	ºC
3	Vazão de ar evaporadora	650	m^3/h
4	Ponto de Força	1,07	W
5	Alimentação elétrica	220-1-60Hz	V-f-Hz
6	Diâmetro tubulações (linhas líquido e gás)	1/4 e 3/8	Poleg.
7	Peso da Evaporadora /Condensador	7,3/19,0	Kgf
8	Dimensões da Evaporadora e Condensadora (A x L x P)	285x805x205 558x386x464	mm
9	Gás refrigerante	R-410 A	
10	Tipo de gabinete	Hi-Wall (parede)	
11	Fabricante de referência	Springer Midea	
12	Modelo da evaporadora/condensadora	42MACT12S5/38TCA12S5	
13	Acessório	Controle remoto com fio	
14	Filtro (segundo classificação da ABNT)	G1	
Observações:			
1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial. 2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.			

Ficha de Características Técnicas – Módulos Evaporador e Condensador (Split)			
Nomenclatura: ME/MC-14 e ME/MC-30		**Quant.: 02**	
Ambientes: Sl. De Esteriliz/Descont. e Sala de Inalação Coletiva			
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Capacidade nominal	18.000	Btu/h
2	TBS do ar	32,0	ºC
3	Vazão de ar evaporadora	830	m^3/h
4	Ponto de Força	1,87	W
5	Alimentação elétrica	220-1-60Hz	V-f-Hz
6	Diâmetro tubulações (linhas líquido e gás)	1/4 e 5/8	Poleg.
7	Peso da Evaporadora /Condensador	18,0/26,7	Kgf
8	Dimensões da Evaporadora e Condensadora (A x L x P)	273x866x424 575x452x553	mm
9	Gás refrigerante	R-410 A	
10	Tipo de gabinete	Built In - Heavy Duct	
11	Fabricante de referência	Carrier	
12	Modelo da evaporadora/condensadora	42BQA018510KC 38KCK018515MC	
13	Acessórios	Controle remoto com fio e kit filtro	
14	Filtro (segundo classificação da ABNT)	G4	
Observações:			
1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial. 2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.			

Ficha de Características Técnicas – Módulos Evaporador e Condensador (Split Inverter)			
Nomenclatura: ME/MC-01, ME/MC-02A e ME/MC-02B		**Quant.: 03**	
Ambientes: Farmácia e Sala de Espera			
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Capacidade nominal	30.000	Btu/h
2	TBS do ar	32,0	ºC
3	Vazão de ar evaporadora	1.400	m^3/h
4	Ponto de Força	2,62	W
5	Alimentação elétrica	220-1-60Hz	V-f-Hz
6	Diâmetro tubulações (linhas líquido e gás)	3/8 e 7/8	Poleg.
7	Peso da Evaporadora /Condensador	28,0/44,0	Kgf
8	Dimensões da Evaporadora e Condensadora (A x L x P)	205x840x840 759x572x572	mm
9	Gás refrigerante	R-410 A	
10	Tipo de gabinete	Cassete 4 vias	
11	Fabricante de referência	Carrier	
12	Modelo da evaporadora/condensadora/grelha	40KVCB30C5 38CCVA30515MC 40KWEL	
13	Acessório	Controle remoto com fio	
14	Filtro (segundo classificação da ABNT)	G1	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas – Módulos Evaporador e Condensador (Split Inverter)			
Nomenclatura: ME/MC-20A e ME/MC-20B		**Quant.: 02**	
Ambientes: Sala de Espera			
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Capacidade nominal	36.000	Btu/h
2	TBS do ar	32,0	ºC
3	Vazão de ar evaporadora	1.715	m^3/h
4	Ponto de Força	3,16	W
5	Alimentação elétrica	220-1-60Hz	V-f-Hz
6	Diâmetro tubulações (linhas líquido e gás)	3/8 e 7/8	Poleg.
7	Peso da Evaporadora /Condensador	29,5/44,0	Kgf
8	Dimensões da Evaporadora e Condensadora (A x L x P)	245x840x840 759x572x572	mm
9	Gás refrigerante	R-410 A	
10	Tipo de gabinete	Cassete 4 vias	
11	Fabricante de referência	Carrier	
12	Modelo da evaporadora/condensadora/grelha	40KVCB36C5 38CCVA36515MC 40KWEL	
13	Acessório	Controle remoto com fio	
14	Filtro (segundo classificação da ABNT)	G1	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas – Módulos Evaporador e Condensador (Split Inverter)			
Nomenclatura: ME/MC-19		**Quant.: 01**	
Ambientes: Sala Educação em Saúde			
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Capacidade nominal	48.000	Btu/h
2	TBS do ar	32,0	ºC
3	Vazão de ar evaporadora	1.715	m^3/h
4	Ponto de Força	4,34	W
5	Alimentação elétrica	220-1-60Hz	V-f-Hz
6	Diâmetro tubulações (linhas líquido e gás)	3/8 e 1	Poleg.
7	Peso da Evaporadora /Condensador	33,1/61,0	Kgf
8	Dimensões da Evaporadora e Condensadora (A x L x P)	287x840x840 626x972x626	mm
9	Gás refrigerante	R-410 A	
10	Tipo de gabinete	Cassete 4 vias	
11	Fabricante de referência	Carrier	
12	Modelo da evaporadora/condensadora/grelha	40KVCB48C5 38CCVA48515MC 40KWEL	
13	Acessório	Controle remoto com fio	
14	Filtro (segundo classificação da ABNT)	G1	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas – Módulos Evaporador e Condensador (Split)			
Nomenclatura: ME/MC-11A e ME/MC-11B		**Quant.: 02**	
Ambientes: Sala ACS			
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Capacidade nominal	18.000	Btu/h
2	TBS do ar	32,0	ºC
3	Vazão de ar evaporadora	880	m^3/h
4	Ponto de Força	1,74	W
5	Alimentação elétrica	220-1-60Hz	V-f-Hz
6	Diâmetro tubulações (linhas líquido e gás)	1/4 e 5/8	Poleg.
7	Peso da Evaporadora /Condensador	16,2/30	Kgf
8	Dimensões da Evaporadora e Condensadora (A x L x P)	260x570x570 575x452x553	mm
9	Gás refrigerante	R-410 A	
10	Tipo de gabinete	Cassete 4 vias	
11	Fabricante de referência	Carrier	
12	Modelo da evaporadora/condensadora/grelha	40KWQU18C5 38KCU018515MC 40KWES	
13	Acessório	Controle remoto com fio	
14	Filtro (segundo classificação da ABNT)	G1	
Observações:			
1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial. 2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.			

Ficha de Características Técnicas Gabinete de Ar Externo			
Nomenclatura: GAE-01		**Quant.: 01**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	1.090	m³/h
2	Pressão estática externa (duto +filtros)	32	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	0,37	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	550	mm
8	Altura máxima	300	mm
9	Profundidade máxima	808	mm
10	Peso	50,0	Kgf
11	Classe de Filtragem	G4 + M5	
12	Aspiração	Dupla	
13	Tipo de Rotor	Sirocco	
14	Fabricante	Soler e Palau ou simiilar	
15	Modelo de referência	GF-160	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 14 e 15 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Gabinete de Ar Externo			
Nomenclatura: GAE-02		**Quant.: 01**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	1.460	m³/h
2	Pressão estática externa (duto +filtros)	35,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	0,55	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	550	mm
8	Altura máxima	300	mm
9	Profundidade máxima	808	mm
10	Peso	50,0	Kgf
11	Classe de Filtragem	G4 + M5	
12	Aspiração	Dupla	
13	Tipo de Rotor	Sirocco	
14	Fabricante	Soler e Palau ou simiilar	
15	Modelo de referência	GF-160	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 14 e 15 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Gabinete de Ar Externo			
Nomenclatura: GAE-03		**Quant.: 01**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	1.840	m³/h
2	Pressão estática externa (duto +filtros)	37,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	1,10	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	550	mm
8	Altura máxima	300	mm
9	Profundidade máxima	808	mm
10	Peso	50,0	Kgf
11	Classe de Filtragem	G4 + M5	
12	Aspiração	Dupla	
13	Tipo de Rotor	Sirocco	
14	Fabricante	Soler e Palau ou simiilar	
15	Modelo de referência	GF-160	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 14 e 15 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Gabinete de Ar Externo			
Nomenclatura: GAE-04		**Quant.: 01**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	2.000	m³/h
2	Pressão estática externa (duto +filtros)	37,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	1,10	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	550	mm
8	Altura máxima	300	mm
9	Profundidade máxima	808	mm
10	Peso	50,0	Kgf
11	Classe de Filtragem	G4 + M5	
12	Aspiração	Dupla	
13	Tipo de Rotor	Sirocco	
14	Fabricante	Soler e Palau ou similar	
15	Modelo de referência	GF-160	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 14 e 15 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Mini-Exaustor			
Nomenclatura: MEX-26		**Quant.: 01**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	580	m³/h
2	Pressão estática externa	16,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	0,112	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	217	mm
8	Altura máxima	232,5	mm
9	Profundidade máxima	302	mm
10	Peso	4,9	Kgf
11	Acessórios	Válvula anti-retorno e timer	
12	Tempo de funcionamento setado	4 minutos	
13	Fabricante	Soler e Palau ou similar	
14	Modelo de referência	TD 800/200 Mixvent	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 13 e 14 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Mini-Exaustor			
Nomenclatura: MEX-31 e MEX-32		**Quant.: 02**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	780	m³/h
2	Pressão estática externa	15,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	0,121	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	217	mm
8	Altura máxima	232,5	mm
9	Profundidade máxima	302	mm
10	Peso	4,9	Kgf
11	Fabricante	Soler e Palau ou similar	
12	Modelo de referência	TD 800/200 Mixvent	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Mini-Exaustor			
Nomenclatura: MEX-27, MEX-28, MEX-29 e MEX-30		**Quant.: 04**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	390	m³/h
2	Pressão estática externa	15,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	0,065	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	200	mm
8	Altura máxima	212	mm
9	Profundidade máxima	275	mm
10	Peso	2,7	Kgf
11	Fabricante	Soler e Palau ou similar	
12	Modelo de referência	TD 500/150 Mixvent	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 11 e 12 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Mini-Exaustor			
Nomenclatura: MEX-02, MEX-04, MEX-05, MEX-06, MEX-07, MEX-08, MEX-09, MEX-10, MEX-11, MEX-12, MEX-14, MEX-16, MEX-18, MEX-19, MEX-20, MEX-21, MEX-22, MEX-23, MEX-24 e MEX-25		**Quant.: 20**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	130	m^3/h
2	Pressão estática externa	3,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	0,014	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	180	mm
8	Altura máxima	180	mm
9	Profundidade máxima	119	mm
10	Peso	0,77	Kgf
11	Acessórios	Válvula anti-retorno e timer	
12	Tempo de funcionamento setado	4 minutos	
13	Fabricante	Soler e Palau ou similar	
14	Modelo de referência	Silent 200	
Observações:			
1) A inclusão de determinado fabricante ou modelo nos campos 13 e 14 não o exime de atender a todas especificações contidas neste memorial. 2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.			

Ficha de Características Técnicas Mini-Exaustor			
Nomenclatura: MEX-01, MEX-03, MEX-13, MEX-15 e MEX-17		**Quant.: 05**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	260	m^3/h
2	Pressão estática externa	3,0	mmca
3	Temperatura de operação	32,0	°C
4	Altitude (acima do nível do mar)	1.050	m
5	Potência do motor elétrico vide observação 3	0,021	kW
6	Alimentação elétrica	220-1-60	V-f-Hz
7	Largura máxima	214	mm
8	Altura máxima	214	mm
9	Profundidade máxima	149	mm
10	Peso	1,25	Kgf
11	Acessórios	Válvula anti-retorno e timer	
12	Tempo de funcionamento setado	4 minutos	
13	Fabricante	Soler e Palau ou similar	
14	Modelo de referência	Silent 300 Plus	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 13 e 14 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Ficha de Características Técnicas Cortina de Ar			
Nomenclatura: CA-01, CA-02, CA-03, CA-04, CA-05 e CA-06		**Quant.: 06**	
Características de Seleção			
Item	Descrição	Valores	Unidade
1	Vazão de ar	2.640	m^3/h
2	Potência do motor elétrico vide observação 3	0,12	kW
3	Alimentação elétrica	220-1-60	V-f-Hz
4	Largura máxima	1535	mm
5	Altura máxima	220	mm
6	Profundidade máxima	165	mm
7	Peso	17	Kgf
8	Acessórios	Controle remoto	
9	Fabricante	Vecair	
10	Modelo de referência	VEC-1500C	

Observações:

1) A inclusão de determinado fabricante ou modelo nos campos 9 e 10 não o exime de atender a todas especificações contidas neste memorial.

2) A potência do motor elétrico deverá ser recalculada pelo fornecedor de acordo o equipamento selecionado.

Zone Checksums

By MAXTERM

00-ESPERA/RECEPAO MOD 01

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 16
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	1.69	1.69	12.84
Glass Solar	3.89	0.00	3.89	29.56
Glass/Door Cond	0.54	0.00	0.54	4.10
Wall Cond	0.13	0.15	0.28	2.13
Partition/Door	0.16		0.16	1.22
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	4.72	1.84	6.56	49.85
Internal Loads				
Lights	1.55	0.00	1.55	11.78
People	2.23	0.00	2.23	16.95
Misc	0.27	0.00	0.27	2.05
Sub Total ==>	4.05	0.00	4.05	30.78
Ceiling Load	0.16	-0.16	0.00	0.00
Ventilation Load	0.00	0.00	2.75	20.90
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.20	-0.20	-1.52
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	8.93	1.48	13.16	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 17
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	3.63	44.38
Glass/Door Cond	0.77	9.41
Wall Cond	0.13	1.59
Partition/Door	0.30	3.67
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	4.83	59.05
Internal Loads		
Lights	1.55	18.95
People	1.36	16.63
Misc	0.27	3.30
Sub Total ==>	3.18	38.88
Ceiling Load	0.17	2.08
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	8.18	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.83	21.28
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-1.42	-1.42	36.41
Wall Cond	-0.06	-0.13	3.33
Partition/Door	-0.61	-0.61	15.64
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-2.09	-2.99	76.67
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.08	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.08	2.05
RA Preheat Diff.		-1.12	28.72
Additional Reheat		0.00	0.00
System Plenum Heat		0.29	-7.44
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-2.17	-3.90	100.00

TEMPERATURES

	Cooling	Heating
SADB	13.3	23.7
Ra Plenum	24.3	20.5
Return	24.3	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	773	773
Terminal	773	773
Main Fan	773	773
Sec Fan	0	0
Nom Vent	143	0
AHU Vent	143	0
Infil	0	0
Min Stop/Rh	0	0
Return	773	773
Exhaust	143	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	18.5	0.0
Lps/m²	10.96	10.96
Lps/kW	58.72	
m²/kW	5.36	
W/m²	186.46	-55.31
No. People	19	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	13.15	10.12	773	24.7	17.3	11.0	13.3	11.9	9.4
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	13.15								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	71		
Part	61		
Int Door	0		
ExFlr	0		
Roof	71	0	0
Wall	39	31	79
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-3.9	773	19.1	23.7
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-3.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

01-FARMACIA

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 18
Outside Air: OADB/WB/HR: 25 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.88	0.88	10.37
Glass Solar	2.57	0.00	2.57	30.27
Glass/Door Cond	0.18	0.00	0.18	2.12
Wall Cond	1.05	0.20	1.25	14.72
Partition/Door	0.08		0.08	0.94
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	3.88	1.08	4.96	58.42
Internal Loads				
Lights	0.65	0.00	0.65	7.66
People	0.53	0.00	0.53	6.24
Misc	1.35	0.00	1.35	15.90
Sub Total ==>	2.53	0.00	2.53	29.80
Ceiling Load	0.08	-0.08	0.00	0.00
Ventilation Load	0.00	0.00	1.11	13.07
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.11	-0.11	-1.30
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	6.49	0.89	8.49	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	2.74	42.35
Glass/Door Cond	0.23	3.55
Wall Cond	1.03	15.92
Partition/Door	0.10	1.55
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	4.10	63.37
Internal Loads		
Lights	0.65	10.05
People	0.29	4.48
Misc	1.35	20.87
Sub Total ==>	2.29	35.39
Ceiling Load	0.08	1.24
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	6.47	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.35	13.36
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.71	-0.71	27.10
Wall Cond	-0.59	-0.71	27.10
Partition/Door	-0.26	-0.26	9.92
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-1.56	-2.03	77.48
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.12	4.58
RA Preheat Diff.		-0.42	16.03
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	1.91
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-1.59	-2.62	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.5	23.2
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	699	699
Terminal	699	699
Main Fan	699	699
Sec Fan	0	0
Nom Vent	64	0
AHU Vent	64	0
Infil	0	0
Min Stop/Rh	0	0
Return	699	699
Exhaust	64	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.2	0.0
Lps/m²	23.62	23.62
Lps/kW	82.36	
m³/kW	3.49	
W/m²	286.60	-88.19
No. People	4	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	8.49	7.31	699	24.7	16.8	10.5	14.5	13.0	10.1
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	8.49								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	30		
Part	26		
Int Door	0		
ExFlr	0		
Roof	30	0	0
Wall	44	16	36
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-2.6	699	19.8	23.2
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-2.6			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

02-SALA ACOLHIMENTO 01

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	9.82
Glass Solar	1.41	0.00	1.41	43.25
Glass/Door Cond	0.12	0.00	0.12	3.68
Wall Cond	0.22	0.05	0.27	8.28
Partition/Door	0.08		0.08	2.45
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.83	0.37	2.20	67.48
Internal Loads				
Lights	0.24	0.00	0.24	7.36
People	0.40	0.00	0.40	12.27
Misc	0.14	0.00	0.14	4.29
Sub Total ==>	0.78	0.00	0.78	23.93
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	9.82
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.23
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.64	0.30	3.26	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.41	57.32
Glass/Door Cond	0.12	4.88
Wall Cond	0.22	8.94
Partition/Door	0.08	3.25
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.83	74.39
Internal Loads		
Lights	0.24	9.76
People	0.22	8.94
Misc	0.14	5.69
Sub Total ==>	0.60	24.39
Ceiling Load	0.03	1.22
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	2.46	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	12.04
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	33.33
Wall Cond	-0.14	-0.17	15.74
Partition/Door	-0.21	-0.21	19.44
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.71	-0.87	80.56
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	2.78
RA Preheat Diff.		-0.16	14.81
Additional Reheat		0.00	0.00
System Plenum Heat		-0.02	1.85
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.72	-1.08	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.2	23.7
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	254	254
Terminal	254	254
Main Fan	254	254
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	254	254
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	8.9	0.0
Lps/m²	23.03	23.03
Lps/kW	78.16	
m²/kW	3.39	
W/m²	294.51	-97.77
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.25	2.83	254	24.7	16.7	10.3	14.2	12.7	9.9
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.25								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	18	8	43
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.1	254	19.8	23.7
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.1			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

03-SALA ACOLHIMENTO 02

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	10.46
Glass Solar	1.37	0.00	1.37	44.77
Glass/Door Cond	0.12	0.00	0.12	3.92
Wall Cond	0.05	0.06	0.11	3.59
Partition/Door	0.08		0.08	2.61
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.38	2.00	65.36
Internal Loads				
Lights	0.24	0.00	0.24	7.84
People	0.40	0.00	0.40	13.07
Misc	0.14	0.00	0.14	4.58
Sub Total ==>	0.78	0.00	0.78	25.49
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.46
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.31
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.43	0.31	3.06	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	60.89
Glass/Door Cond	0.12	5.33
Wall Cond	0.05	2.22
Partition/Door	0.08	3.56
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.00
Internal Loads		
Lights	0.24	10.67
People	0.22	9.78
Misc	0.14	6.22
Sub Total ==>	0.60	26.67
Ceiling Load	0.03	1.33
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.25	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.21	-0.21	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.58	-0.73	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.59	-0.94	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.58	20.58
Lps/kW	74.62	
m²/kW	3.63	
W/m²	275.64	-84.91
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.04	2.62	227	24.7	16.8	10.4	14.0	12.5	9.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.04								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.9	227	19.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

04-SALA ACOLHIMENTO 03

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	10.46
Glass Solar	1.37	0.00	1.37	44.77
Glass/Door Cond	0.12	0.00	0.12	3.92
Wall Cond	0.05	0.06	0.11	3.59
Partition/Door	0.08		0.08	2.61
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.38	2.00	65.36
Internal Loads				
Lights	0.24	0.00	0.24	7.84
People	0.40	0.00	0.40	13.07
Misc	0.14	0.00	0.14	4.58
Sub Total ==>	0.78	0.00	0.78	25.49
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.46
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.31
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.43	0.31	3.06	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	60.89
Glass/Door Cond	0.12	5.33
Wall Cond	0.05	2.22
Partition/Door	0.08	3.56
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.00
Internal Loads		
Lights	0.24	10.67
People	0.22	9.78
Misc	0.14	6.22
Sub Total ==>	0.60	26.67
Ceiling Load	0.03	1.33
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.25	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.21	-0.21	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.58	-0.73	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.59	-0.94	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.58	20.58
Lps/kW	74.62	
m²/kW	3.63	
W/m²	275.64	-84.91
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.04	2.62	227	24.7	16.8	10.4	14.0	12.5	9.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.04								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.9	227	19.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

05-SALA ACOLHIMENTO 04

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	10.46
Glass Solar	1.37	0.00	1.37	44.77
Glass/Door Cond	0.12	0.00	0.12	3.92
Wall Cond	0.05	0.06	0.11	3.59
Partition/Door	0.08		0.08	2.61
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.38	2.00	65.36
Internal Loads				
Lights	0.24	0.00	0.24	7.84
People	0.40	0.00	0.40	13.07
Misc	0.14	0.00	0.14	4.58
Sub Total ==>	0.78	0.00	0.78	25.49
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.46
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.31
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.43	0.31	3.06	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	60.89
Glass/Door Cond	0.12	5.33
Wall Cond	0.05	2.22
Partition/Door	0.08	3.56
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.00
Internal Loads		
Lights	0.24	10.67
People	0.22	9.78
Misc	0.14	5.22
Sub Total ==>	0.60	26.67
Ceiling Load	0.03	1.33
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.25	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.21	-0.21	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.58	-0.73	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.59	-0.94	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.58	20.58
Lps/kW	74.62	
m³/kW	3.63	
W/m²	275.64	-84.91
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB/WB/HR °C	°C	g/kg	Leave DB/WB/HR °C	°C	g/kg
Main Clg	3.04	2.62	227	24.7	15.8	10.4	14.0	12.5	9.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.04								

AREAS

	Gross Total m²	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.9	227	19.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

TRACE® 700 v6.3.4 calculated at 04:02 PM on 09/10/2020
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Zone Checksums

By MAXTERM

06-CONSULT INDIFER 01

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	10.46
Glass Solar	1.37	0.00	1.37	44.77
Glass/Door Cond	0.12	0.00	0.12	3.92
Wall Cond	0.05	0.06	0.11	3.59
Partition/Door	0.08		0.08	2.61
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.38	2.00	65.36
Internal Loads				
Lights	0.24	0.00	0.24	7.84
People	0.40	0.00	0.40	13.07
Misc	0.14	0.00	0.14	4.58
Sub Total ==>	0.78	0.00	0.78	25.49
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.46
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.31
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.43	0.31	3.06	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	60.89
Glass/Door Cond	0.12	5.33
Wall Cond	0.05	2.22
Partition/Door	0.08	3.56
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.00
Internal Loads		
Lights	0.24	10.67
People	0.22	9.78
Misc	0.14	6.22
Sub Total ==>	0.60	26.67
Ceiling Load	0.03	1.33
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.25	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.21	-0.21	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.58	-0.73	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.59	-0.94	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.58	20.58
Lps/kW	74.62	
m³/kW	3.63	
W/m²	275.64	-84.91
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB/WB/HR °C	°C	g/kg	Leave DB/WB/HR °C	°C	g/kg
Main Clg	3.04	2.62	227	24.7	16.8	10.4	14.0	12.5	9.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.04								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.9	227	19.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

TRACE® 700 v6.3.4 calculated at 04:02 PM on 09/10/2020
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Zone Checksums

By MAXTERM

07-CONSULT INDIFER 02

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	10.46
Glass Solar	1.37	0.00	1.37	44.77
Glass/Door Cond	0.12	0.00	0.12	3.92
Wall Cond	0.05	0.06	0.11	3.59
Partition/Door	0.08		0.08	2.61
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.38	2.00	65.36
Internal Loads				
Lights	0.24	0.00	0.24	7.84
People	0.40	0.00	0.40	13.07
Misc	0.14	0.00	0.14	4.58
Sub Total ==>	0.78	0.00	0.78	25.49
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.46
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.31
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.43	0.31	3.06	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	60.89
Glass/Door Cond	0.12	5.33
Wall Cond	0.05	2.22
Partition/Door	0.08	3.56
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.00
Internal Loads		
Lights	0.24	10.67
People	0.22	9.78
Misc	0.14	6.22
Sub Total ==>	0.60	26.67
Ceiling Load	0.03	1.33
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.25	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.21	-0.21	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.58	-0.73	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.59	-0.94	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Fric	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
MinStop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.58	20.58
Lps/kW	74.62	
m²/kW	3.63	
W/m²	275.64	-84.91
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.04	2.62	227	24.7	16.8	10.4	14.0	12.5	9.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.04								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.9	227	19.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

08-CONSULT INDIFER 03

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	10.46
Glass Solar	1.37	0.00	1.37	44.77
Glass/Door Cond	0.12	0.00	0.12	3.92
Wall Cond	0.05	0.06	0.11	3.59
Partition/Door	0.08		0.08	2.61
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.38	2.00	65.36
Internal Loads				
Lights	0.24	0.00	0.24	7.84
People	0.40	0.00	0.40	13.07
Misc	0.14	0.00	0.14	4.58
Sub Total ==>	0.78	0.00	0.78	25.49
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.46
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.31
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.43	0.31	3.06	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 25

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	60.89
Glass/Door Cond	0.12	5.33
Wall Cond	0.05	2.22
Partition/Door	0.08	3.56
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.00
Internal Loads		
Lights	0.24	10.67
People	0.22	9.78
Misc	0.14	6.22
Sub Total ==>	0.60	26.67
Ceiling Load	0.03	1.33
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	2.25	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.21	-0.21	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.58	-0.73	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.59	-0.94	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.58	20.58
Lps/kW	74.62	
m²/kW	3.63	
W/m²	275.64	-84.91
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.04	2.62	227	24.7	16.8	10.4	14.0	12.5	9.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.04								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.9	227	19.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

09-CONSULT INDIFER 04

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.31	0.31	10.20
Glass Solar	1.37	0.00	1.37	45.07
Glass/Door Cond	0.12	0.00	0.12	3.95
Wall Cond	0.05	0.06	0.11	3.62
Partition/Door	0.08		0.08	2.63
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.37	1.99	65.46
Internal Loads				
Lights	0.24	0.00	0.24	7.89
People	0.40	0.00	0.40	13.16
Misc	0.14	0.00	0.14	4.61
Sub Total ==>	0.78	0.00	0.78	25.66
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.53
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.05	-0.05	-1.64
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.44	0.28	3.04	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	60.62
Glass/Door Cond	0.12	5.31
Wall Cond	0.05	2.21
Partition/Door	0.08	3.54
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	71.68
Internal Loads		
Lights	0.24	10.62
People	0.22	9.73
Misc	0.14	6.19
Sub Total ==>	0.60	26.55
Ceiling Load	0.04	1.77
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	2.26	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.12	11.65
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	34.95
Wall Cond	-0.01	-0.03	2.91
Partition/Door	-0.21	-0.21	20.39
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.58	-0.72	69.90
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.02	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	2.91
RA Preheat Diff.		-0.15	14.56
Additional Reheat		0.00	0.00
System Plenum Heat		-0.13	12.62
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.60	-1.03	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	25.2	20.1
Return	25.2	20.1
Ret/OA	25.2	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	229	229
Terminal	229	229
Main Fan	229	229
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	229	229
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.8	0.0
Lps/m²	20.71	20.71
Lps/kW	75.75	
m²/kW	3.66	
W/m²	273.25	-93.42
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.02	2.59	229	25.2	17.0	10.4	14.0	12.8	10.0
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.02								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	21		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.0	229	19.4	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

10-SALA ACS

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 18
Outside Air: OADB/WB/HR: 25 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.77	0.77	9.38
Glass Solar	2.54	0.00	2.54	30.94
Glass/Door Cond	0.18	0.00	0.18	2.19
Wall Cond	0.57	0.15	0.72	8.77
Partition/Door	0.04		0.04	0.49
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	3.33	0.92	4.25	51.77
Internal Loads				
Lights	0.58	0.00	0.58	7.06
People	1.05	0.00	1.05	12.79
Misc	1.40	0.00	1.40	17.05
Sub Total ==>	3.03	0.00	3.03	36.91
Ceiling Load	0.07	-0.07	0.00	0.00
Ventilation Load	0.00	0.00	1.03	12.55
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.10	-0.10	-1.22
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	6.43	0.75	8.21	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	2.71	44.14
Glass/Door Cond	0.23	3.75
Wall Cond	0.52	8.47
Partition/Door	0.04	0.65
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	3.50	57.00
Internal Loads		
Lights	0.58	9.45
People	0.59	9.61
Misc	1.40	22.80
Sub Total ==>	2.57	41.86
Ceiling Load	0.07	1.14
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	6.14	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.31	15.42
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.71	-0.71	35.32
Wall Cond	-0.22	-0.28	13.93
Partition/Door	-0.12	-0.12	5.97
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-1.05	-1.42	70.65
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.08	3.98
RA Preheat Diff.		-0.42	20.90
Additional Reheat		0.00	0.00
System Plenum Heat		-0.09	4.48
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-1.08	-2.01	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	22.7
Ra Plenum	24.6	20.5
Return	24.6	20.5
Ret/OA	24.7	20.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	627	627
Terminal	627	627
Main Fan	627	627
Sec Fan	0	0
Nom Vent	60	0
AHU Vent	60	0
Infil	0	0
MinStop/Rh	0	0
Return	627	627
Exhaust	60	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.6	0.0
Lps/m²	23.99	23.99
Lps/kW	76.34	
m³/kW	3.18	
W/m²	313.99	-76.93
No. People	8	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	8.21	6.87	627	24.7	16.9	10.5	14.0	12.8	10.0
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	8.21								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	26		
Part	12		
Int Door	0		
ExFlr	0		
Roof	26	0	0
Wall	33	16	48
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-2.0	627	19.8	22.7
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-2.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

11-SALA IMUNIZACAO

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 16
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.32	0.32	12.75
Glass Solar	0.09	0.00	0.09	3.59
Glass/Door Cond	0.03	0.00	0.03	1.20
Wall Cond	0.22	0.03	0.25	9.96
Partition/Door	0.06		0.06	2.39
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.40	0.35	0.75	29.88
Internal Loads				
Lights	0.31	0.00	0.31	12.35
People	0.66	0.00	0.66	26.29
Misc	0.14	0.00	0.14	5.58
Sub Total ==>	1.11	0.00	1.11	44.22
Ceiling Load	0.05	-0.05	0.00	0.00
Ventilation Load	0.00	0.00	0.72	28.69
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.07	-0.07	-2.79
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.56	0.23	2.51	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 14
OADB: 29

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	5.97
Glass/Door Cond	0.04	2.99
Wall Cond	0.32	23.88
Partition/Door	0.05	3.73
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	36.57
Internal Loads		
Lights	0.31	23.13
People	0.37	27.61
Misc	0.14	10.45
Sub Total ==>	0.82	61.19
Ceiling Load	0.03	2.24
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	1.34	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.25	-0.25	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.44	-0.62	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.04	0.00
RA Preheat Diff.		-0.34	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.03	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.47	-0.89	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.8	25.0
Ra Plenum	24.8	20.1
Return	24.8	20.1
Ret/OA	25.5	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	110	110
Terminal	110	110
Main Fan	110	110
Sec Fan	0	0
Nom Vent	38	0
AHU Vent	38	0
Infil	0	0
Min Stop/Rh	0	0
Return	110	110
Exhaust	38	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	34.2	0.0
Lps/m²	7.77	7.77
Lps/kW	43.55	
m²/kW	5.60	
W/m²	178.36	-63.15
No. People	5	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.52	1.66	110	25.5	18.2	12.0	11.8	11.0	9.0
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.52								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	14		
Part	25		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.9	110	17.6	25.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.9			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

Zone Checksums

By MAXTERM

12-SALA MEDICACAO

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 15
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.28	0.28	10.18
Glass Solar	0.09	0.00	0.09	3.27
Glass/Door Cond	0.03	0.00	0.03	1.09
Wall Cond	0.26	0.04	0.30	10.91
Partition/Door	0.02		0.02	0.73
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.40	0.32	0.72	26.18
Internal Loads				
Lights	0.31	0.00	0.31	11.27
People	0.79	0.00	0.79	28.73
Misc	0.14	0.00	0.14	5.09
Sub Total ==>	1.24	0.00	1.24	45.09
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.87	31.64
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.08	-0.08	-2.91
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.68	0.20	2.75	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	5.67
Glass/Door Cond	0.04	2.84
Wall Cond	0.36	25.53
Partition/Door	0.01	0.71
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	34.75
Internal Loads		
Lights	0.31	21.99
People	0.44	31.21
Misc	0.14	9.93
Sub Total ==>	0.89	63.12
Ceiling Load	0.03	2.13
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	1.41	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.29	-0.47	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Exhaust Heat	0.00	0.00	0.00
OA Preheat Diff.		0.07	0.00
RA Preheat Diff.		-0.44	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.03	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.32	-0.81	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.3	23.8
Ra Plenum	24.6	20.1
Return	24.6	20.1
Ret/OA	25.6	20.1
Fn MtrTD	0.0	0.0
Fn BltTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	109	109
Terminal	109	109
Main Fan	109	109
Sec Fan	0	0
Nom Vent	45	0
AHU Vent	45	0
Infil	0	0
Min Stop/Rh	0	0
Return	109	109
Exhaust	45	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	41.4	0.0
Lps/m²	7.71	7.71
Lps/kW	39.49	
m²/kW	5.12	
W/m²	195.05	-56.44
No. People	6	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.75	1.72	109	25.6	18.5	12.4	11.3	10.6	8.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.75								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	14		
Part	10		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.8	109	17.1	23.8
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.8			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

13-SALA INALACAO COLETIVA

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 15
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.59	0.59	11.68
Glass Solar	0.19	0.00	0.19	3.76
Glass/Door Cond	0.06	0.00	0.06	1.19
Wall Cond	0.53	0.08	0.61	12.08
Partition/Door	0.04		0.04	0.79
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.82	0.67	1.49	29.50
Internal Loads				
Lights	0.65	0.00	0.65	12.87
People	1.45	0.00	1.45	28.71
Misc	0.00	0.00	0.00	0.00
Sub Total ==>	2.10	0.00	2.10	41.58
Ceiling Load	0.08	-0.08	0.00	0.00
Ventilation Load	0.00	0.00	1.60	31.68
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.14	-0.14	-2.77
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	3.00	0.45	5.05	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.16	6.37
Glass/Door Cond	0.07	2.79
Wall Cond	0.74	29.48
Partition/Door	0.02	0.80
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.99	39.44
Internal Loads		
Lights	0.65	25.90
People	0.81	32.27
Misc	0.00	0.00
Sub Total ==>	1.46	58.17
Ceiling Load	0.06	2.39
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		0.00
OA Preheat Diff.		0.15
RA Preheat Diff.		-0.81
Additional Reheat		0.00
System Plenum Heat		0.10
Underflr Sup Ht Pkup		0
Supply Air Leakage		0
Grand Total ==>	2.51	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.33	21.85
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.16	-0.16	10.60
Wall Cond	-0.23	-0.26	17.22
Partition/Door	-0.20	-0.20	13.25
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.95	62.91
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.05	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.15	-9.93
RA Preheat Diff.		-0.81	53.64
Additional Reheat		0.00	0.00
System Plenum Heat		0.10	-6.62
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.64	-1.51	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.2	24.2
Ra Plenum	24.6	20.1
Return	24.6	20.1
Ret/OA	25.6	20.1
Fn Mtr/TD	0.0	0.0
Fn Bld/TD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	193	193
Terminal	193	193
Main Fan	193	193
Sec Fan	0	0
Nom Vent	83	0
AHU Vent	83	0
Infil	0	0
Min Stop/Rh	0	0
Return	193	193
Exhaust	83	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	42.8	0.0
Lps/m²	6.53	6.53
Lps/kW	38.29	
m³/kW	5.86	
W/m²	170.54	-51.34
No. People	11	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	5.04	3.16	193	25.6	18.6	12.4	11.2	10.4	8.6
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	5.04								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	30		
Part	20		
Int Door	0		
ExFlr	0		
Roof	30	0	0
Wall	20	4	18
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.5	193	17.0	24.2
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.5			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

14-SALA COLETA

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 15
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.28	0.28	14.14
Glass Solar	0.09	0.00	0.09	4.55
Glass/Door Cond	0.03	0.00	0.03	1.52
Wall Cond	0.26	0.04	0.30	15.15
Partition/Door	0.02		0.02	1.01
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.40	0.32	0.72	36.36
Internal Loads				
Lights	0.31	0.00	0.31	15.66
People	0.40	0.00	0.40	20.20
Misc	0.14	0.00	0.14	7.07
Sub Total ==>	0.85	0.00	0.85	42.93
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.45	22.73
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-2.02
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.29	0.24	1.98	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	6.72
Glass/Door Cond	0.04	3.36
Wall Cond	0.36	30.25
Partition/Door	0.01	0.84
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	41.18
Internal Loads		
Lights	0.31	26.05
People	0.22	18.49
Misc	0.14	11.76
Sub Total ==>	0.67	56.30
Ceiling Load	0.03	2.52
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	1.19	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.29	-0.47	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.00	0.00
RA Preheat Diff.		-0.19	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.03	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.32	-0.63	100.00

TEMPERATURES

	Cooling	Heating
SADB	12.7	23.9
Ra Plenum	24.6	20.1
Return	24.6	20.1
Ret/OA	25.1	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	105	105
Terminal	105	105
Main Fan	105	105
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	105	105
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	22.3	0.0
Lps/m²	7.43	7.43
Lps/kW	53.03	
m²/kW	7.14	
W/m²	140.04	-43.83
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	1.98	1.45	105	25.1	17.6	11.3	12.7	11.6	9.3
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1.98								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	14		
Part	10		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.6	105	18.5	23.9
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.6			

Project Name:
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Zone Checksums

By MAXTERM

15-SALA CURATIVOS

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 15
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.28	0.28	13.33
Glass Solar	0.09	0.00	0.09	4.29
Glass/Door Cond	0.03	0.00	0.03	1.43
Wall Cond	0.26	0.04	0.30	14.29
Partition/Door	0.03		0.03	1.43
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.41	0.32	0.73	34.76
Internal Loads				
Lights	0.31	0.00	0.31	14.76
People	0.53	0.00	0.53	25.24
Misc	0.00	0.00	0.00	0.00
Sub Total ==>	0.84	0.00	0.84	40.00
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.58	27.62
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.05	-0.05	-2.38
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.29	0.23	2.10	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	7.08
Glass/Door Cond	0.04	3.54
Wall Cond	0.36	31.86
Partition/Door	0.02	1.77
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.50	44.25
Internal Loads		
Lights	0.31	27.43
People	0.29	25.66
Misc	0.00	0.00
Sub Total ==>	0.60	53.10
Ceiling Load	0.03	2.65
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		0.00
OA Preheat Diff.		0.03
RA Preheat Diff.		-0.27
Additional Reheat		0.00
System Plenum Heat		0.05
Underflr Sup Ht Pkup		0
Supply Air Leakage		0
Grand Total ==>	1.13	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.18	-0.18	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.37	-0.55	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.03	0.00
RA Preheat Diff.		-0.27	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.05	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.40	-0.74	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.9	25.1
Ra Plenum	24.6	20.1
Return	24.6	20.1
Ret/OA	25.4	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	92	92
Terminal	92	92
Main Fan	92	92
Sec Fan	0	0
Nom Vent	30	0
AHU Vent	30	0
Infil	0	0
Min Stop/Rh	0	0
Return	92	92
Exhaust	30	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	32.5	0.0
Lps/m²	6.55	6.55
Lps/kW	43.90	
m³/kW	6.70	
W/m²	149.18	-52.72
No. People	4	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.10	1.42	92	25.4	18.1	11.8	11.9	10.9	8.9
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.10								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	14		
Part	18		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.7	92	17.7	25.1
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.7			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

15-SALA PROCEDIMENTOS

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 15
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.28	0.28	12.56
Glass Solar	0.09	0.00	0.09	4.04
Glass/Door Cond	0.03	0.00	0.03	1.35
Wall Cond	0.26	0.04	0.30	13.45
Partition/Door	0.02		0.02	0.90
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.40	0.32	0.72	32.29
Internal Loads				
Lights	0.31	0.00	0.31	13.90
People	0.53	0.00	0.53	23.77
Misc	0.14	0.00	0.14	6.28
Sub Total ==>	0.98	0.00	0.98	43.95
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.58	26.01
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.05	-0.05	-2.24
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.42	0.23	2.23	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	6.35
Glass/Door Cond	0.04	3.17
Wall Cond	0.36	28.57
Partition/Door	0.01	0.79
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	38.89
Internal Loads		
Lights	0.31	24.60
People	0.29	23.02
Misc	0.14	11.11
Sub Total ==>	0.74	58.73
Ceiling Load	0.03	2.38
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	1.26	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.06	-0.06	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.29	-0.47	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.02	0.00
RA Preheat Diff.		-0.26	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.03	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.32	-0.68	100.00

TEMPERATURES

	Cooling	Heating
SADB	12.2	23.8
Ra Plenum	24.6	20.1
Return	24.6	20.1
Ret/OA	25.3	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	106	106
Terminal	106	106
Main Fan	106	106
Sec Fan	0	0
Nom Vent	30	0
AHU Vent	30	0
Infil	0	0
Min Stop/Rh	0	0
Return	106	106
Exhaust	30	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	28.3	0.0
Lps/m²	7.51	7.51
Lps/kW	47.62	
m²/kW	6.34	
W/m²	157.68	-47.70
No. People	4	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.22	1.54	106	25.3	17.9	11.6	12.2	11.3	9.1
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.22								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	14		
Part	10		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.7	106	18.0	23.8
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.7			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

16-AREA TEC CPD 01

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 2 / 14
Outside Air: OADB/WB/HR: 29 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.07	0.07	2.36
Glass Solar	0.00	0.00	0.00	0.00
Glass/Door Cond	0.00	0.00	0.00	0.00
Wall Cond	0.24	0.03	0.27	9.12
Partition/Door	0.08		0.08	2.70
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.32	0.10	0.42	14.19
Internal Loads				
Lights	0.10	0.00	0.10	3.38
People	0.13	0.00	0.13	4.39
Misc	2.00	0.00	2.00	67.57
Sub Total ==>	2.23	0.00	2.23	75.34
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.38	12.84
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.07	-0.07	-2.36
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.58	0.00	2.96	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.00	0.00
Glass/Door Cond	0.00	0.00
Wall Cond	0.27	10.67
Partition/Door	0.06	2.37
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.33	13.04
Internal Loads		
Lights	0.10	3.95
People	0.07	2.77
Misc	2.00	79.05
Sub Total ==>	2.17	85.77
Ceiling Load	0.03	1.19
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	2.53	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.05	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	0.00	0.00	0.00
Wall Cond	-0.06	-0.06	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.16	-0.21	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.02	0.00
RA Preheat Diff.		-0.13	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.41	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.15	0.09	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.7	19.5
Ra Plenum	24.3	20.1
Return	24.3	20.1
Ret/OA	24.5	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	279	279
Terminal	279	279
Main Fan	279	279
Sec Fan	0	0
Nom Vent	14	0
AHU Vent	14	0
Infil	0	0
Min Stop/Rh	0	0
Return	279	279
Exhaust	14	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	5.1	0.0
Lps/m²	63.16	63.16
Lps/kW	94.54	
m²/kW	1.50	
W/m²	667.72	0.00
No. People	1	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB/HR °C	Enter WB/HR g/kg	Leave DB °C	Leave WB/HR °C	Leave WB/HR g/kg
Main Clg	2.95	2.65	279	24.5	15.3	8.6	11.7	10.6	8.6
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.95								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	4		
Part	14		
Int Door	0		
ExFlr	0		
Roof	4	0	0
Wall	5	0	0
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	0.0	0	0.0	0.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	0.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

18-EDUCACAO EM SAUDE

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 18
Outside Air: OADB/WB/HR: 25 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.92	0.92	6.94
Glass Solar	2.58	0.00	2.58	19.46
Glass/Door Cond	0.18	0.00	0.18	1.36
Wall Cond	0.41	0.10	0.51	3.85
Partition/Door	0.11		0.11	0.83
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	3.28	1.02	4.30	32.43
Internal Loads				
Lights	0.66	0.00	0.66	4.98
People	4.09	0.00	4.09	30.84
Misc	0.49	0.00	0.49	3.70
Sub Total ==>	5.24	0.00	5.24	39.52
Ceiling Load	0.06	-0.06	0.00	0.00
Ventilation Load	0.00	0.00	3.99	30.09
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.27	-0.27	-2.04
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	8.58	0.69	13.26	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	2.75	39.17
Glass/Door Cond	0.23	3.28
Wall Cond	0.43	6.13
Partition/Door	0.13	1.85
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	3.54	50.43
Internal Loads		
Lights	0.66	9.40
People	2.27	32.34
Misc	0.49	6.98
Sub Total ==>	3.42	48.72
Ceiling Load	0.06	0.85
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	7.02	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.35	9.38
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.71	-0.71	19.03
Wall Cond	-0.25	-0.31	8.31
Partition/Door	-0.35	-0.35	9.38
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-1.31	-1.72	46.11
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.04	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.38	-10.19
RA Preheat Diff.		-2.32	62.20
Additional Reheat		0.00	0.00
System Plenum Heat		-0.07	1.88
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-1.35	-3.73	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.3	23.4
Ra Plenum	24.1	20.4
Return	24.1	20.4
Ret/OA	24.6	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	547	547
Terminal	547	547
Main Fan	547	547
Sec Fan	0	0
Nom Vent	233	0
AHU Vent	233	0
Infil	0	0
Min Stop/Rh	0	0
Return	547	547
Exhaust	233	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	42.5	0.0
Lps/m²	18.15	18.15
Lps/kW	41.25	
m²/kW	2.27	
W/m²	439.69	-123.54
No. People	31	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	13.26	8.06	547	24.6	18.2	12.3	11.3	10.6	8.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	13.26								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	30		
Part	35		
Int Door	0		
ExFlr	0		
Roof	30	0	0
Wall	35	16	45
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-3.7	547	17.2	23.4
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-3.7			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

20- SALA NASF

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.33	0.33	10.38
Glass Solar	1.41	0.00	1.41	44.34
Glass/Door Cond	0.12	0.00	0.12	3.77
Wall Cond	0.05	0.06	0.11	3.46
Partition/Door	0.14		0.14	4.40
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.72	0.39	2.11	66.35
Internal Loads				
Lights	0.24	0.00	0.24	7.55
People	0.40	0.00	0.40	12.58
Misc	0.14	0.00	0.14	4.40
Sub Total ==>	0.78	0.00	0.78	24.53
Ceiling Load	0.02	-0.02	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.06
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.94
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.52	0.34	3.18	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.41	60.26
Glass/Door Cond	0.12	5.13
Wall Cond	0.05	2.14
Partition/Door	0.14	5.98
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.72	73.50
Internal Loads		
Lights	0.24	10.26
People	0.22	9.40
Misc	0.14	5.98
Sub Total ==>	0.60	25.64
Ceiling Load	0.02	0.85
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	2.34	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	11.40
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	31.58
Wall Cond	-0.01	-0.03	2.63
Partition/Door	-0.37	-0.37	32.46
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.74	-0.89	78.07
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	2.63
RA Preheat Diff.		-0.16	14.04
Additional Reheat		0.00	0.00
System Plenum Heat		-0.06	5.26
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.75	-1.14	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.1	24.0
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	239	239
Terminal	239	239
Main Fan	239	239
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	239	239
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.4	0.0
Lps/m²	21.61	21.61
Lps/kW	75.23	
m²/kW	3.48	
W/m²	287.11	-102.62
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.17	2.75	239	24.2	16.6	10.4	14.1	12.4	9.6
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.17								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	37		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.1	239	19.7	24.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.1			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

21-CONSULT 01

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.33	0.33	10.71
Glass Solar	1.37	0.00	1.37	44.48
Glass/Door Cond	0.12	0.00	0.12	3.90
Wall Cond	0.05	0.06	0.11	3.57
Partition/Door	0.08		0.08	2.60
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.39	2.01	65.26
Internal Loads				
Lights	0.24	0.00	0.24	7.79
People	0.40	0.00	0.40	12.99
Misc	0.14	0.00	0.14	4.55
Sub Total ==>	0.78	0.00	0.78	25.32
Ceiling Load	0.02	-0.02	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.39
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.97
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.42	0.34	3.08	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	61.16
Glass/Door Cond	0.12	5.36
Wall Cond	0.05	2.23
Partition/Door	0.08	3.57
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.32
Internal Loads		
Lights	0.24	10.71
People	0.22	9.82
Misc	0.14	6.25
Sub Total ==>	0.60	26.79
Ceiling Load	0.02	0.89
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.24	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.22	-0.22	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.74	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.60	-0.98	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.52	20.52
Lps/kW	73.74	
m²/kW	3.59	
W/m²	278.05	-87.75
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.07	2.65	227	24.2	16.6	10.4	14.0	12.3	9.5
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.07								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	22		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.0	227	19.6	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

22-CONSULT 02

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.33	0.33	10.71
Glass Solar	1.37	0.00	1.37	44.48
Glass/Door Cond	0.12	0.00	0.12	3.90
Wall Cond	0.05	0.06	0.11	3.57
Partition/Door	0.08		0.08	2.60
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.39	2.01	65.26
Internal Loads				
Lights	0.24	0.00	0.24	7.79
People	0.40	0.00	0.40	12.99
Misc	0.14	0.00	0.14	4.55
Sub Total ==>	0.78	0.00	0.78	25.32
Ceiling Load	0.02	-0.02	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.39
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.97
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.42	0.34	3.08	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	61.16
Glass/Door Cond	0.12	5.36
Wall Cond	0.05	2.23
Partition/Door	0.08	3.57
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.32
Internal Loads		
Lights	0.24	10.71
People	0.22	9.82
Misc	0.14	6.25
Sub Total ==>	0.60	26.79
Ceiling Load	0.02	0.89
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.24	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.22	-0.22	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.74	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.60	-0.98	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.52	20.52
Lps/kW	73.74	
m²/kW	3.59	
W/m²	278.05	-87.75
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.07	2.65	227	24.2	16.6	10.4	14.0	12.3	9.5
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.07								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	22		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.0	227	19.6	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

23-CONSULT 03

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.33	0.33	10.71
Glass Solar	1.37	0.00	1.37	44.48
Glass/Door Cond	0.12	0.00	0.12	3.90
Wall Cond	0.05	0.06	0.11	3.57
Partition/Door	0.08		0.08	2.60
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.39	2.01	65.26
Internal Loads				
Lights	0.24	0.00	0.24	7.79
People	0.40	0.00	0.40	12.99
Misc	0.14	0.00	0.14	4.55
Sub Total ==>	0.78	0.00	0.78	25.32
Ceiling Load	0.02	-0.02	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.39
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.97
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.42	0.34	3.08	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	61.16
Glass/Door Cond	0.12	5.36
Wall Cond	0.05	2.23
Partition/Door	0.08	3.57
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.32
Internal Loads		
Lights	0.24	10.71
People	0.22	9.82
Misc	0.14	6.25
Sub Total ==>	0.60	26.79
Ceiling Load	0.02	0.89
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Exhaust Heat	0.00	0.00
Grand Total ==>	2.24	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.22	-0.22	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.74	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.60	-0.98	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
MinStop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.52	20.52
Lps/kW	73.74	
m²/kW	3.59	
W/m²	278.05	-87.75
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.07	2.65	227	24.2	16.6	10.4	14.0	12.3	9.5
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.07								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	22		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.0	227	19.6	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

TRACE® 700 v6.3.4 calculated at 04:02 PM on 09/10/2020
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Zone Checksums

By MAXTERM

24-CONSULT 04

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.33	0.33	10.71
Glass Solar	1.37	0.00	1.37	44.48
Glass/Door Cond	0.12	0.00	0.12	3.90
Wall Cond	0.05	0.06	0.11	3.57
Partition/Door	0.08		0.08	2.60
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.39	2.01	65.26
Internal Loads				
Lights	0.24	0.00	0.24	7.79
People	0.40	0.00	0.40	12.99
Misc	0.14	0.00	0.14	4.55
Sub Total ==>	0.78	0.00	0.78	25.32
Ceiling Load	0.02	-0.02	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.39
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.97
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.42	0.34	3.08	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	61.16
Glass/Door Cond	0.12	5.36
Wall Cond	0.05	2.23
Partition/Door	0.08	3.57
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.32
Internal Loads		
Lights	0.24	10.71
People	0.22	9.82
Misc	0.14	6.25
Sub Total ==>	0.60	26.79
Ceiling Load	0.02	0.89
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.24	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.22	-0.22	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.74	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.60	-0.98	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.52	20.52
Lps/kW	73.74	
m²/kW	3.59	
W/m²	278.05	-87.75
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.07	2.65	227	24.2	16.6	10.4	14.0	12.3	9.5
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.07								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	22		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.0	227	19.6	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

25-CONSULT 05

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.33	0.33	10.71
Glass Solar	1.37	0.00	1.37	44.48
Glass/Door Cond	0.12	0.00	0.12	3.90
Wall Cond	0.05	0.06	0.11	3.57
Partition/Door	0.08		0.08	2.60
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.39	2.01	65.26
Internal Loads				
Lights	0.24	0.00	0.24	7.79
People	0.40	0.00	0.40	12.99
Misc	0.14	0.00	0.14	4.55
Sub Total ==>	0.78	0.00	0.78	25.32
Ceiling Load	0.02	-0.02	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.39
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.97
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.42	0.34	3.08	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	61.16
Glass/Door Cond	0.12	5.36
Wall Cond	0.05	2.23
Partition/Door	0.08	3.57
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.32
Internal Loads		
Lights	0.24	10.71
People	0.22	9.82
Misc	0.14	6.25
Sub Total ==>	0.60	26.79
Ceiling Load	0.02	0.89
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	2.24	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.22	-0.22	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.74	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.60	-0.98	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.52	20.52
Lps/kW	73.74	
m³/kW	3.59	
W/m²	278.05	-87.75
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB/WB/HR °C	°C	g/kg	Leave DB/WB/HR °C	°C	g/kg
Main Clg	3.07	2.65	227	24.2	16.6	10.4	14.0	12.3	9.5
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.07								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	11		
Part	22		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.0	227	19.6	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

26-CONSULT 06

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.33	0.33	10.71
Glass Solar	1.37	0.00	1.37	44.48
Glass/Door Cond	0.12	0.00	0.12	3.90
Wall Cond	0.05	0.06	0.11	3.57
Partition/Door	0.08		0.08	2.60
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	1.62	0.39	2.01	65.26
Internal Loads				
Lights	0.24	0.00	0.24	7.79
People	0.40	0.00	0.40	12.99
Misc	0.14	0.00	0.14	4.55
Sub Total ==>	0.78	0.00	0.78	25.32
Ceiling Load	0.02	-0.02	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.39
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.97
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.42	0.34	3.08	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	1.37	61.16
Glass/Door Cond	0.12	5.36
Wall Cond	0.05	2.23
Partition/Door	0.08	3.57
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.62	72.32
Internal Loads		
Lights	0.24	10.71
People	0.22	9.82
Misc	0.14	6.25
Sub Total ==>	0.60	26.79
Ceiling Load	0.02	0.89
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		0.00
OA Preheat Diff.		-0.03
RA Preheat Diff.		-0.16
Additional Reheat		0.00
System Plenum Heat		-0.05
Underflr Sup Ht Pkup		0
Supply Air Leakage		0
Grand Total ==>	2.24	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.13	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.36	-0.36	0.00
Wall Cond	-0.01	-0.03	0.00
Partition/Door	-0.22	-0.22	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.74	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	0.00
RA Preheat Diff.		-0.16	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.60	-0.98	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.0	23.5
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn Mtr/TD	0.0	0.0
Fn Bld/TD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	227	227
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	9.9	0.0
Lps/m²	20.52	20.52
Lps/kW	73.74	
m³/kW	3.59	
W/m²	278.05	-87.75
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.07	2.65	227	24.2	15.6	10.4	14.0	12.3	9.5
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.07								

AREAS

	Gross Total m²	Glass m²	Glass (%)
Floor	11		
Part	22		
Int Door	0		
ExFlr	0		
Roof	11	0	0
Wall	10	8	81
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.0	227	19.6	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.0			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

TRACE® 700 v6.3.4 calculated at 04:02 PM on 09/10/2020
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Zone Checksums

By MAXTERM

27-AREA TEC CPD 02

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 2 / 19
Outside Air: OADB/WB/HR: 26 / 20 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.14	0.14	4.50
Glass Solar	0.00	0.00	0.00	0.00
Glass/Door Cond	0.00	0.00	0.00	0.00
Wall Cond	0.33	0.04	0.37	11.90
Partition/Door	0.11		0.11	3.54
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.44	0.18	0.62	19.94
Internal Loads				
Lights	0.10	0.00	0.10	3.22
People	0.13	0.00	0.13	4.18
Misc	2.00	0.00	2.00	64.31
Sub Total ==>	2.23	0.00	2.23	71.70
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.32	10.29
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.06	-0.06	-1.93
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.70	0.09	3.11	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 19
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.00	0.00
Glass/Door Cond	0.00	0.00
Wall Cond	0.33	12.50
Partition/Door	0.11	4.17
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.44	16.67
Internal Loads		
Lights	0.10	3.79
People	0.07	2.65
Misc	2.00	75.76
Sub Total ==>	2.17	82.20
Ceiling Load	0.03	1.14
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	2.64	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.05	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	0.00	0.00	0.00
Wall Cond	-0.06	-0.06	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.16	-0.21	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	0.01	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.02	0.00
RA Preheat Diff.		-0.13	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.51	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.15	0.19	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.8	19.5
Ra Plenum	24.1	20.4
Return	24.1	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	294	294
Terminal	294	294
Main Fan	294	294
Sec Fan	0	0
Nom Vent	14	0
AHU Vent	14	0
Infil	0	0
Min Stop/Rh	0	0
Return	294	294
Exhaust	14	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	4.8	0.0
Lps/m²	66.56	66.56
Lps/kW	94.83	
m²/kW	1.42	
W/m²	701.39	0.00
No. People	1	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.10	2.81	294	24.2	15.2	8.6	11.8	10.6	8.6
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.10								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	4		
Part	14		
Int Door	0		
ExFlr	0		
Roof	4	0	0
Wall	5	0	0
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	0.0	0	0.0	0.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	0.0			

Project Name:
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Zone Checksums

By MAXTERM

28-ALMOXARIFADO

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 1 / 18
Outside Air: OADB/WB/HR: 26 / 20 / 14

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.53	0.53	10.47
Glass Solar	2.71	0.00	2.71	53.56
Glass/Door Cond	0.23	0.00	0.23	4.55
Wall Cond	0.39	0.12	0.51	10.08
Partition/Door	0.03		0.03	0.59
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	3.36	0.65	4.01	79.25
Internal Loads				
Lights	0.39	0.00	0.39	7.71
People	0.26	0.00	0.26	5.14
Misc	0.00	0.00	0.00	0.00
Sub Total ==>	0.65	0.00	0.65	12.85
Ceiling Load	0.03	-0.03	0.00	0.00
Ventilation Load	0.00	0.00	0.43	8.50
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.03	-0.03	-0.59
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	4.04	0.59	5.06	100.00

CLG SPACE PEAK

Mo/Hr: 1 / 18
OADB: 26

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	2.71	68.96
Glass/Door Cond	0.23	5.85
Wall Cond	0.39	9.92
Partition/Door	0.03	0.76
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	3.36	85.50
Internal Loads		
Lights	0.39	9.92
People	0.15	3.82
Misc	0.00	0.00
Sub Total ==>	0.54	13.74
Ceiling Load	0.03	0.76
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	3.93	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.20	12.74
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.71	-0.71	45.22
Wall Cond	-0.16	-0.20	12.74
Partition/Door	-0.09	-0.09	5.73
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.96	-1.20	76.43
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.02	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.07	4.46
RA Preheat Diff.		-0.18	11.46
Additional Reheat		0.00	0.00
System Plenum Heat		-0.12	7.64
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.98	-1.57	100.00

TEMPERATURES

	Cooling	Heating
SADB	14.8	23.1
Ra Plenum	24.0	20.4
Return	24.0	20.4
Ret/OA	24.2	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	440	440
Terminal	440	440
Main Fan	440	440
Sec Fan	0	0
Nom Vent	30	0
AHU Vent	30	0
Infil	0	0
Min Stop/Rh	0	0
Return	440	440
Exhaust	30	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	6.9	0.0
Lps/m²	24.85	24.85
Lps/kW	86.73	
m²/kW	3.49	
W/m²	286.35	-89.06
No. People	2	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	5.07	4.62	440	24.2	16.5	10.3	14.8	12.9	9.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	5.07								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	18		
Part	9		
Int Door	0		
ExFlr	0		
Roof	18	0	0
Wall	28	16	55
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.6	440	19.9	23.1
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.6			

Project Name:
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Zone Checksums

By MAXTERM

29-SALA ESTERERELE DESCONTAMINACAO

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 17
Outside Air: OADB/WB/HR: 26 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.28	0.28	7.02
Glass Solar	0.00	0.00	0.00	0.00
Glass/Door Cond	0.00	0.00	0.00	0.00
Wall Cond	0.40	0.04	0.44	11.03
Partition/Door	0.13		0.13	3.26
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.53	0.32	0.85	21.30
Internal Loads				
Lights	0.22	0.00	0.22	5.51
People	0.26	0.00	0.26	6.52
Misc	1.40	0.00	1.40	35.09
Sub Total ==>	1.88	0.00	1.88	47.12
Ceiling Load	0.07	-0.07	0.00	0.00
Ventilation Load	0.00	0.00	1.50	37.59
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.24	-0.24	-6.02
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	2.48	0.01	3.99	100.00

CLG SPACE PEAK

Mo/Hr: 12 / 18
OADB: 25

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.00	0.00
Glass/Door Cond	0.00	0.00
Wall Cond	0.41	17.15
Partition/Door	0.14	5.86
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.55	23.01
Internal Loads		
Lights	0.22	9.21
People	0.15	6.28
Misc	1.40	58.58
Sub Total ==>	1.77	74.06
Ceiling Load	0.07	2.93
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		0.00
OA Preheat Diff.		0.00
RA Preheat Diff.		0.00
Additional Reheat		0.00
System Plenum Heat		0.00
Underflr Sup Ht Pkup		0.00
Supply Air Leakage		0.00
Grand Total ==>	2.39	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.12	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	0.00	0.00	0.00
Wall Cond	-0.12	-0.14	0.00
Partition/Door	-0.15	-0.15	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.27	-0.41	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.16	0.00
RA Preheat Diff.		-0.63	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.50	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.24	-0.38	100.00

TEMPERATURES

	Cooling	Heating
SADB	10.3	20.0
Ra Plenum	23.9	20.4
Return	23.9	20.4
Ret/OA	24.5	20.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Fric	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	224	224
Terminal	224	224
Main Fan	224	224
Sec Fan	0	0
Nom Vent	57	0
AHU Vent	57	0
Infil	0	0
Min Stop/Rh	0	0
Return	224	224
Exhaust	57	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	25.3	0.0
Lps/m²	22.09	22.09
Lps/kW	56.10	
m²/kW	2.54	
W/m²	393.60	-37.34
No. People	2	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	3.99	2.76	224	24.5	16.6	10.2	10.3	10.2	8.8
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.99								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	10		
Part	21		
Int Door	0		
ExFlr	0		
Roof	10	0	0
Wall	11	0	0
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.4	224	18.5	20.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.4			

Project Name:
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Zone Checksums

By MAXTERM

30-CONSULT ODONTOLOGICO 01

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 2 / 14
Outside Air: OADB/WB/HR: 29 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.21	0.21	10.00
Glass Solar	0.08	0.00	0.08	3.81
Glass/Door Cond	0.04	0.00	0.04	1.90
Wall Cond	0.33	0.05	0.38	18.10
Partition/Door	0.02		0.02	0.95
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.47	0.26	0.73	34.76
Internal Loads				
Lights	0.31	0.00	0.31	14.76
People	0.40	0.00	0.40	19.05
Misc	0.26	0.00	0.26	12.38
Sub Total ==>	0.97	0.00	0.97	46.19
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.44	20.95
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.90
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.48	0.18	2.10	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	6.11
Glass/Door Cond	0.04	3.05
Wall Cond	0.36	27.48
Partition/Door	0.01	0.76
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	37.40
Internal Loads		
Lights	0.31	23.66
People	0.22	16.79
Misc	0.26	19.85
Sub Total ==>	0.79	60.31
Ceiling Load	0.03	2.29
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	1.31	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.29	-0.47	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.00	0.00
RA Preheat Diff.		-0.18	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.32	-0.63	100.00

TEMPERATURES

	Cooling	Heating
SADB	13.0	23.5
Ra Plenum	24.4	20.1
Return	24.4	20.1
Ret/OA	25.2	20.1
Fn Mtr/TD	0.0	0.0
Fn Bld/TD	0.0	0.0
Fn Fric	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	119	119
Terminal	119	119
Main Fan	119	119
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	119	119
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	19.6	0.0
Lps/m²	8.44	8.44
Lps/kW	56.85	
m²/kW	6.74	
W/m²	148.38	-44.91
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.09	1.62	119	25.2	17.4	10.9	13.0	11.8	9.4
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.09								

AREAS

	Gross Total m²	Glass m²	Glass (%)
Floor	14		
Part	10		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.6	119	18.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.6			

Project Name:
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Zone Checksums

By MAXTERM

31-CONSULT ODONTOLOGICO 02

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 2 / 14
Outside Air: OADB/WB/HR: 29 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.21	0.21	10.00
Glass Solar	0.08	0.00	0.08	3.81
Glass/Door Cond	0.04	0.00	0.04	1.90
Wall Cond	0.33	0.05	0.38	18.10
Partition/Door	0.02		0.02	0.95
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.47	0.26	0.73	34.76
Internal Loads				
Lights	0.31	0.00	0.31	14.76
People	0.40	0.00	0.40	19.05
Misc	0.26	0.00	0.26	12.38
Sub Total ==>	0.97	0.00	0.97	46.19
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.44	20.95
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.90
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.48	0.18	2.10	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	6.11
Glass/Door Cond	0.04	3.05
Wall Cond	0.36	27.48
Partition/Door	0.01	0.76
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	37.40
Internal Loads		
Lights	0.31	23.66
People	0.22	16.79
Misc	0.26	19.85
Sub Total ==>	0.79	60.31
Ceiling Load	0.03	2.29
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	1.31	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.29	-0.47	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.00	0.00
RA Preheat Diff.		-0.18	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.32	-0.63	100.00

TEMPERATURES

	Cooling	Heating
SADB	13.0	23.5
Ra Plenum	24.4	20.1
Return	24.4	20.1
Ret/OA	25.2	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	119	119
Terminal	119	119
Main Fan	119	119
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	119	119
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	19.6	0.0
Lps/m²	8.44	8.44
Lps/kW	56.85	
m²/kW	6.74	
W/m²	148.39	-44.98
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.09	1.62	119	25.2	17.4	10.9	13.0	11.8	9.4
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.09								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	14		
Part	10		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.6	119	18.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.6			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

32-CONSULT ODONTOLOGICO 03

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 2 / 14
Outside Air: OADB/WB/HR: 29 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.21	0.21	10.00
Glass Solar	0.08	0.00	0.08	3.81
Glass/Door Cond	0.04	0.00	0.04	1.90
Wall Cond	0.33	0.05	0.38	18.10
Partition/Door	0.02		0.02	0.95
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.47	0.26	0.73	34.76
Internal Loads				
Lights	0.31	0.00	0.31	14.76
People	0.40	0.00	0.40	19.05
Misc	0.26	0.00	0.26	12.38
Sub Total ==>	0.97	0.00	0.97	46.19
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.44	20.95
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.90
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.48	0.18	2.10	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	6.11
Glass/Door Cond	0.04	3.05
Wall Cond	0.36	27.48
Partition/Door	0.01	0.76
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	37.40
Internal Loads		
Lights	0.31	23.66
People	0.22	16.79
Misc	0.26	19.85
Sub Total ==>	0.79	60.31
Ceiling Load	0.03	2.29
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
System Plenum Heat		
Underflr Sup Ht Pkup		
Supply Air Leakage		
Grand Total ==>	1.31	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.29	-0.47	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.00	0.00
RA Preheat Diff.		-0.18	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.32	-0.63	100.00

TEMPERATURES

	Cooling	Heating
SADB	13.0	23.5
Ra Plenum	24.4	20.1
Return	24.4	20.1
Ret/OA	25.2	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	119	119
Terminal	119	119
Main Fan	119	119
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	119	119
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	19.6	0.0
Lps/m²	8.44	8.44
Lps/kW	56.85	
m²/kW	6.74	
W/m²	148.39	-44.98
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.09	1.62	119	25.2	17.4	10.9	13.0	11.8	9.4
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.09								

AREAS

	Gross Total m²	Glass m²	Glass (%)
Floor	14		
Part	10		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.6	119	18.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.6			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

33-CONSULT ODONTOLOGICO 04

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 2 / 14
Outside Air: OADB/WB/HR: 29 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.21	0.21	10.00
Glass Solar	0.08	0.00	0.08	3.81
Glass/Door Cond	0.04	0.00	0.04	1.90
Wall Cond	0.33	0.05	0.38	18.10
Partition/Door	0.02		0.02	0.95
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.47	0.26	0.73	34.76
Internal Loads				
Lights	0.31	0.00	0.31	14.76
People	0.40	0.00	0.40	19.05
Misc	0.26	0.00	0.26	12.38
Sub Total ==>	0.97	0.00	0.97	46.19
Ceiling Load	0.04	-0.04	0.00	0.00
Ventilation Load	0.00	0.00	0.44	20.95
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.04	-0.04	-1.90
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	1.48	0.18	2.10	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.08	6.11
Glass/Door Cond	0.04	3.05
Wall Cond	0.36	27.48
Partition/Door	0.01	0.76
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.49	37.40
Internal Loads		
Lights	0.31	23.66
People	0.22	16.79
Misc	0.26	19.85
Sub Total ==>	0.79	60.31
Ceiling Load	0.03	2.29
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		0.00
OA Preheat Diff.		0.00
RA Preheat Diff.		-0.18
Additional Reheat		0.00
System Plenum Heat		0.02
Underflr Sup Ht Pkup		0
Supply Air Leakage		0
Grand Total ==>	1.31	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.16	0.00
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.08	-0.08	0.00
Wall Cond	-0.11	-0.13	0.00
Partition/Door	-0.10	-0.10	0.00
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.29	-0.47	0.00
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.03	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.00	0.00
RA Preheat Diff.		-0.18	0.00
Additional Reheat		0.00	0.00
System Plenum Heat		0.02	0.00
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.32	-0.63	100.00

TEMPERATURES

	Cooling	Heating
SADB	13.0	23.5
Ra Plenum	24.4	20.1
Return	24.4	20.1
Ret/OA	25.2	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	119	119
Terminal	119	119
Main Fan	119	119
Sec Fan	0	0
Nom Vent	23	0
AHU Vent	23	0
Infil	0	0
Min Stop/Rh	0	0
Return	119	119
Exhaust	23	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	19.6	0.0
Lps/m²	8.44	8.44
Lps/kW	56.85	
m³/kW	6.74	
W/m²	148.39	-44.98
No. People	3	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	2.09	1.62	119	25.2	17.4	10.9	13.0	11.8	9.4
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.09								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	14		
Part	10		
Int Door	0		
ExFlr	0		
Roof	14	0	0
Wall	10	2	19
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-0.6	119	18.7	23.5
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-0.6			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

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Zone Checksums

By MAXTERM

34-SALA REUNIOES EQUIPE E MULTIUSO

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 15
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.58	0.58	10.14
Glass Solar	0.19	0.00	0.19	3.32
Glass/Door Cond	0.06	0.00	0.06	1.05
Wall Cond	0.53	0.08	0.61	10.66
Partition/Door	0.04		0.04	0.70
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.82	0.66	1.48	25.87
Internal Loads				
Lights	0.55	0.00	0.55	11.36
People	1.88	0.00	1.88	32.87
Misc	0.14	0.00	0.14	2.45
Sub Total ==>	2.67	0.00	2.67	46.68
Ceiling Load	0.10	-0.10	0.00	0.00
Ventilation Load	0.00	0.00	1.75	30.59
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.18	-0.18	-3.15
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	3.59	0.38	5.72	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.16	5.33
Glass/Door Cond	0.07	2.33
Wall Cond	0.74	24.67
Partition/Door	0.02	0.67
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	0.99	33.00
Internal Loads		
Lights	0.65	21.67
People	1.15	38.33
Misc	0.14	4.67
Sub Total ==>	1.94	64.67
Ceiling Load	0.07	2.33
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		0.00
OA Preheat Diff.		0.14
RA Preheat Diff.		-0.86
Additional Reheat		0.00
System Plenum Heat		0.05
Underflr Sup Ht Pkup		0
Supply Air Leakage		0
Grand Total ==>	3.00	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.33	20.37
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.16	-0.16	9.88
Wall Cond	-0.23	-0.26	16.05
Partition/Door	-0.20	-0.20	12.35
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.59	-0.95	58.64
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.05	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.14	-8.64
RA Preheat Diff.		-0.86	53.09
Additional Reheat		0.00	0.00
System Plenum Heat		0.05	-3.09
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.64	-1.62	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.4	23.6
Ra Plenum	24.8	20.1
Return	24.8	20.1
Ret/OA	25.6	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	236	236
Terminal	236	236
Main Fan	236	236
Sec Fan	0	0
Nom Vent	91	0
AHU Vent	91	0
Infil	0	0
Min Stop/Rh	0	0
Return	236	236
Exhaust	91	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	38.3	0.0
Lps/m²	7.96	7.96
Lps/kW	41.22	
m²/kW	5.18	
W/m²	192.88	-55.03
No. People	16	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	5.71	3.62	236	25.6	18.4	12.2	11.4	10.8	9.0
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	5.71								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	30		
Part	20		
Int Door	0		
ExFlr	0		
Roof	30	0	0
Wall	20	4	18
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.6	236	17.3	23.6
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.6			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

Memorial Descritivo / Cad.Espec. - Mecânica Ar Cond. (1514464 59)

Zone Checksums

By MAXTERM

35-SALA ADMINISTRATIVA

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 2 / 14
Outside Air: OADB/WB/HR: 29 / 21 / 15

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	0.44	0.44	8.37
Glass Solar	0.15	0.00	0.15	2.85
Glass/Door Cond	0.09	0.00	0.09	1.71
Wall Cond	0.67	0.10	0.77	14.64
Partition/Door	0.07		0.07	1.33
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	0.98	0.54	1.52	28.90
Internal Loads				
Lights	0.65	0.00	0.65	12.36
People	0.92	0.00	0.92	17.49
Misc	1.27	0.00	1.27	24.14
Sub Total ==>	2.84	0.00	2.84	53.99
Ceiling Load	0.08	-0.08	0.00	0.00
Ventilation Load	0.00	0.00	0.98	18.63
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.08	-0.08	-1.52
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	3.90	0.38	5.26	100.00

CLG SPACE PEAK

Mo/Hr: 2 / 13
OADB: 28

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	0.16	4.57
Glass/Door Cond	0.07	2.00
Wall Cond	0.74	21.14
Partition/Door	0.03	0.86
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	1.00	28.57
Internal Loads		
Lights	0.65	18.57
People	0.51	14.57
Misc	1.27	36.29
Sub Total ==>	2.43	69.43
Ceiling Load	0.07	2.00
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Exhaust Heat		0.00
OA Preheat Diff.		-0.03
RA Preheat Diff.		-0.39
Additional Reheat		0.00
System Plenum Heat		-0.05
Underflr Sup Ht Pkup		0
Supply Air Leakage		0
Grand Total ==>	3.50	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.33	21.02
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-0.16	-0.16	10.19
Wall Cond	-0.23	-0.26	16.56
Partition/Door	-0.35	-0.35	22.29
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-0.74	-1.10	70.06
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.05	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		-0.03	1.91
RA Preheat Diff.		-0.39	24.84
Additional Reheat		0.00	0.00
System Plenum Heat		-0.05	3.18
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-0.79	-1.57	100.00

TEMPERATURES

	Cooling	Heating
SADB	13.3	23.4
Ra Plenum	24.4	20.1
Return	24.4	20.1
Ret/OA	25.1	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	327	327
Terminal	327	327
Main Fan	327	327
Sec Fan	0	0
Nom Vent	53	0
AHU Vent	53	0
Infil	0	0
Min Stop/Rh	0	0
Return	327	327
Exhaust	53	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	16.0	0.0
Lps/m²	11.06	11.06
Lps/kW	62.24	
m³/kW	5.63	
W/m²	177.60	-53.39
No. People	7	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	5.26	4.19	327	25.1	17.2	10.7	13.3	12.1	9.6
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	5.26								

AREAS

	Gross Total	Glass m²	Glass (%)
Floor	30		
Part	35		
Int Door	0		
ExFlr	0		
Roof	30	0	0
Wall	20	4	18
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-1.6	327	18.9	23.4
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-1.6			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

TRACE® 700 v6.3.4 calculated at 04:02 PM on 09/10/2020
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Zone Checksums

By MAXTERM

37-ESPERA/RECEPAO MOD 02

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 12 / 16
Outside Air: OADB/WB/HR: 27 / 21 / 16

	Space Sens. + Lat. kW	Plenum Sens. + Lat kW	Net Total kW	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0.00	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00	0.00
Roof Cond	0.00	1.98	1.98	9.92
Glass Solar	3.62	0.00	3.62	18.15
Glass/Door Cond	0.54	0.00	0.54	2.71
Wall Cond	0.75	0.21	0.96	4.81
Partition/Door	0.16		0.16	0.80
Floor	0.00		0.00	0.00
Adjacent Floor	0.00	0.00	0.00	0.00
Infiltration	0.00		0.00	0.00
Sub Total ==>	5.07	2.19	7.26	36.39
Internal Loads				
Lights	1.91	0.00	1.91	9.57
People	5.04	0.00	5.04	25.26
Misc	0.27	0.00	0.27	1.35
Sub Total ==>	7.22	0.00	7.22	36.19
Ceiling Load	0.32	-0.32	0.00	0.00
Ventilation Load	0.00	0.00	6.20	31.08
Adj Air Trans Heat	0		0	0
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	0.00		0.00	0.00
Exhaust Heat		-0.73	-0.73	-3.66
Sup. Fan Heat			0.00	0.00
Ret. Fan Heat		0.00	0.00	0.00
Duct Heat Pkup		0.00	0.00	0.00
Underflr Sup Ht Pkup			0	0
Supply Air Leakage		0	0	0
Grand Total ==>	12.61	1.14	19.95	100.00

CLG SPACE PEAK

Mo/Hr: 12 / 16
OADB: 27

	Space Sensible kW	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0.00	0.00
Skylite Cond	0.00	0.00
Roof Cond	0.00	0.00
Glass Solar	3.62	33.96
Glass/Door Cond	0.54	5.07
Wall Cond	0.75	7.04
Partition/Door	0.16	1.50
Floor	0.00	0.00
Adjacent Floor	0.00	0.00
Infiltration	0.00	0.00
Sub Total ==>	5.07	47.56
Internal Loads		
Lights	1.91	17.92
People	3.09	28.99
Misc	0.27	2.53
Sub Total ==>	5.27	49.44
Ceiling Load	0.32	3.00
Ventilation Load	0.00	0.00
Adj Air Trans Heat	0	0
Ov/Undr Sizing	0.00	0.00
Grand Total ==>	10.66	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 13

	Space Peak Space Sens kW	Coil Peak Tot Sens kW	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0.00	0.00	0.00
Skylite Cond	0.00	0.00	0.00
Roof Cond	0.00	-0.97	15.93
Glass Solar	0.00	0.00	0.00
Glass/Door Cond	-1.42	-1.42	23.32
Wall Cond	-0.35	-0.44	7.22
Partition/Door	-0.61	-0.61	10.02
Floor	0.00	0.00	0.00
Adjacent Floor	0.00	0.00	0.00
Infiltration	0.00	0.00	0.00
Sub Total ==>	-2.38	-3.44	56.49
Internal Loads			
Lights	0.00	0.00	0.00
People	0.00	0	0.00
Misc	0.00	0.00	0.00
Sub Total ==>	0.00	0.00	0.00
Ceiling Load	-0.16	0	0.00
Ventilation Load	0.00	0.00	0.00
Adj Air Trans Heat	0	0	0
Ov/Undr Sizing	0.00	0.00	0.00
Exhaust Heat		0.00	0.00
OA Preheat Diff.		0.30	-4.93
RA Preheat Diff.		-2.89	47.45
Additional Reheat		0.00	0.00
System Plenum Heat		-0.06	0.99
Underflr Sup Ht Pkup		0	0.00
Supply Air Leakage		0	0.00
Grand Total ==>	-2.54	-6.09	100.00

TEMPERATURES

	Cooling	Heating
SADB	11.9	23.8
Ra Plenum	25.1	20.1
Return	25.1	20.1
Ret/OA	25.7	20.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS

	Cooling	Heating
Diffuser	880	880
Terminal	880	880
Main Fan	880	880
Sec Fan	0	0
Nom Vent	323	0
AHU Vent	323	0
Infil	0	0
Min Stop/Rh	0	0
Return	880	880
Exhaust	323	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	36.7	0.0
Lps/m²	10.11	10.11
Lps/kW	44.09	
m²/kW	4.36	
W/m²	229.21	-69.99
No. People	43	

COOLING COIL SELECTION

	Total Capacity kW	Sens Cap. kW	Coil Airflow L/s	Enter DB °C	Enter WB °C	Enter HR g/kg	Leave DB °C	Leave WB °C	Leave HR g/kg
Main Clg	19.95	13.11	880	25.7	18.4	12.1	11.9	11.3	9.3
Aux Clg	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.00	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	19.95								

AREAS

	Gross Total m²	Glass m²	Glass (%)
Floor	87		
Part	61		
Int Door	0		
ExFlr	0		
Roof	87	0	0
Wall	59	31	53
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity kW	Coil Airflow L/s	Ent °C	Lvg °C
Main Htg	-6.1	880	17.4	23.8
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-6.1			

Project Name:
Dataset Name: 086-UBS-ESTRUTURAL-paciencia.trc

ANEXO III – RESULTADO DE CÁLCULO DE DUTOS

GAE-01

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********** CUSTOMER DIRECT SERVICE NETWORK **********

  For exclusive use by: ENG DE SISTEMAS TERM. SOB LICEN. COLDEX

        E Q U A L   F R I C T I O N   D U C T   D E S I G N   (VER. 6.08)
        =========   ===============   =======   ===========
  This report was prepared on 08/24/20 at 12:10:19.
  TRUNK DUCT INFORMATION
  ======================
  FRICTION LOSS :    154.17 (PASCALS PER 100 METERS)
  MAXIMUM PRESSURE DROP :    191.85 (PASCALS)
  ------------------------------------------------------------------------------
  | SEC.| EQUIV.| RECT. INSIDE | DUCT VELOCITY |  DUCT | FRICTION | FITTING  |
  | NO. | DIAM. |  DIMENSIONS  | ROUND | RECT. |  CMS  | LOSSES   | LOSSES   |
  |     | (MM.) | (MM. X  MM.) | (MPS) | (MPS) |       |(PASCALS) |(PASCALS) |
  |-----|-------|--------------|-------|-------|-------|----------|----------|
  | 100.|  260. | 405. X  150. |  5.71 |  5.00 |  .303 |      1.5 |    102.0 |*
  | 110.|  145. | 120. X  150. |  3.90 |  3.63 |  .064 |      7.6 |       .5 |
  | 120.|  240. | 330. X  150. |  5.38 |  4.88 |  .239 |     26.7 |      1.9 |*
  | 130.|  210. | 250. X  150. |  4.97 |  4.61 |  .172 |     14.5 |       .1 |*
  | 140.|  175. | 170. X  150. |  4.41 |  4.15 |  .106 |      9.9 |       .1 |*
  | 150.|  145. | 165. X  105. |  3.85 |  3.60 |  .061 |      3.8 |       .1 |*
  ------------------------------------------------------------------------------
```

GAE-02

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********** CUSTOMER DIRECT SERVICE NETWORK **********

  For exclusive use by: ENG DE SISTEMAS TERM. SOB LICEN. COLDEX

        E Q U A L   F R I C T I O N   D U C T   D E S I G N   (VER. 6.08)
        =========   ===============   =======   ===========
  This report was prepared on 08/24/20 at 12:29:37.
  TRUNK DUCT INFORMATION
  ======================
  FRICTION LOSS :    142.00 (PASCALS PER 100 METERS)
  MAXIMUM PRESSURE DROP :    167.94 (PASCALS)
  ------------------------------------------------------------------------------
  | SEC.| EQUIV.| RECT. INSIDE | DUCT VELOCITY |  DUCT | FRICTION | FITTING  |
  | NO. | DIAM. |  DIMENSIONS  | ROUND | RECT. |  CMS  | LOSSES   | LOSSES   |
  |     | (MM.) | (MM. X  MM.) | (MPS) | (MPS) |       |(PASCALS) |(PASCALS) |
  |-----|-------|--------------|-------|-------|-------|----------|----------|
  | 100.|  295. | 545. X  150. |  5.94 |  5.00 |  .406 |      1.4 |    102.8 |*
  | 110.|  200. | 345. X  105. |  4.62 |  3.99 |  .144 |      2.8 |     10.9 |
  | 120.|  250. | 365. X  150. |  5.33 |  4.78 |  .261 |     15.4 |      1.3 |*
  | 130.|  200. | 220. X  150. |  4.59 |  4.31 |  .142 |     13.3 |       .1 |*
  | 140.|  130. | 130. X  105. |  3.44 |  3.26 |  .044 |      6.3 |       .2 |*
  ------------------------------------------------------------------------------
```

GAE-03

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********** CUSTOMER DIRECT SERVICE NETWORK **********

  For exclusive use by: ENG DE SISTEMAS TERM. SOB LICEN. COLDEX

        E Q U A L   F R I C T I O N   D U C T   D E S I G N   (VER. 6.08)
        =========   ===============   =======   ===========
  This report was prepared on 08/24/20 at 12:46:25.
  TRUNK DUCT INFORMATION
  ======================
  FRICTION LOSS :    109.92 (PASCALS PER 100 METERS)
  MAXIMUM PRESSURE DROP :    179.76 (PASCALS)
  ------------------------------------------------------------------------------
  | SEC.| EQUIV.| RECT. INSIDE | DUCT VELOCITY |  DUCT | FRICTION | FITTING  |
  | NO. | DIAM. |  DIMENSIONS  | ROUND | RECT. |  CMS  | LOSSES   | LOSSES   |
  |     | (MM.) | (MM. X  MM.) | (MPS) | (MPS) |       |(PASCALS) |(PASCALS) |
  |-----|-------|--------------|-------|-------|-------|----------|----------|
  | 100.|  340. | 515. X  200. |  5.69 |  5.00 |  .511 |      1.1 |    102.0 |*
  | 110.|  250. | 370. X  150. |  4.68 |  4.20 |  .231 |      5.4 |      1.7 |
  | 120.|  270. | 435. X  150. |  4.91 |  4.30 |  .281 |     15.7 |      1.9 |*
  | 130.|  245. | 345. X  150. |  4.60 |  4.14 |  .214 |     10.3 |       .0 |*
  | 140.|  210. | 255. X  150. |  4.19 |  3.91 |  .147 |      7.0 |       .0 |*
  | 150.|  190. | 260. X  125. |  3.92 |  3.54 |  .111 |     13.0 |       .7 |*
  ------------------------------------------------------------------------------
```

GAE-04

```
********** CUSTOMER DIRECT SERVICE NETWORK **********

  For exclusive use by: ENG DE SISTEMAS TERM. SOB LICEN. COLDEX

        E Q U A L   F R I C T I O N   D U C T   D E S I G N   (VER. 6.08)
        =========   ===============   =======   ===========
  This report was prepared on 08/24/20 at 13:29:21.
  TRUNK DUCT INFORMATION
  ======================
  FRICTION LOSS :    106.98 (PASCALS PER 100 METERS)
  MAXIMUM PRESSURE DROP :    158.82 (PASCALS)
  ------------------------------------------------------------------------------
  | SEC.| EQUIV.| RECT. INSIDE | DUCT VELOCITY |  DUCT | FRICTION | FITTING  |
  | NO. | DIAM. |  DIMENSIONS  | ROUND | RECT. |  CMS  | LOSSES   | LOSSES   |
  |     | (MM.) | (MM. X  MM.) | (MPS) | (MPS) |       |(PASCALS) |(PASCALS) |
  |-----|-------|--------------|-------|-------|-------|----------|----------|
  | 100.|  355. | 560. X  200. |  5.74 |  5.00 |  .556 |      1.6 |    102.7 |*
  | 110.|  285. | 495. X  150. |  5.02 |  4.35 |  .322 |      2.1 |       .8 |
  | 120.|  255. | 375. X  150. |  4.64 |  4.16 |  .233 |     13.2 |      1.2 |*
  | 130.|  210. | 255. X  150. |  4.13 |  3.82 |  .144 |      6.9 |       .1 |*
  | 140.|  145. | 170. X  105. |  3.22 |  2.99 |  .053 |      5.3 |       .1 |*
  ------------------------------------------------------------------------------
```

ME-14

********** CUSTOMER DIRECT SERVICE NETWORK **********

For exclusive use by: ENG DE SISTEMAS TERM. SOB LICEN. COLDEX

E Q U A L F R I C T I O N D U C T D E S I G N (VER. 6.08)

This report was prepared on 11/26/20 at 16:17:38.
TRUNK DUCT INFORMATION

FRICTION LOSS : 59.63 (PASCALS PER 100 METERS)
MAXIMUM PRESSURE DROP : 139.73 (PASCALS)

SEC. NO.	EQUIV. DIAM. (MM.)	RECT. INSIDE DIMENSIONS (MM. X MM.)	DUCT VELOCITY ROUND (MPS)	DUCT VELOCITY RECT. (MPS)	DUCT CMS	FRICTION LOSSES (PASCALS)	FITTING LOSSES (PASCALS)	
100.	305.	955. X 105.	3.21	2.30	.231	.6	100.5	*
110.	235.	500. X 105.	2.71	2.21	.115	.6	.2	*
120.	235.	495. X 105.	2.71	2.23	.115	.6	.2	

MEX- 31 e 32

********** CUSTOMER DIRECT SERVICE NETWORK **********

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E Q U A L F R I C T I O N D U C T D E S I G N (VER. 6.08)

This report was prepared on 08/24/20 at 13:57:13.
TRUNK DUCT INFORMATION

FRICTION LOSS : 139.78 (PASCALS PER 100 METERS)
MAXIMUM PRESSURE DROP : 48.46 (PASCALS)

SEC. NO.	EQUIV. DIAM. (MM.)	RECT. INSIDE DIMENSIONS (MM. X MM.)	DUCT VELOCITY ROUND (MPS)	DUCT VELOCITY RECT. (MPS)	DUCT CMS	FRICTION LOSSES (PASCALS)	FITTING LOSSES (PASCALS)	
100.	255.	275. X 200.	4.33	4.00	.217	5.5	1.9	*
110.	220.	200. X 200.	3.92	3.69	.144	2.1	.1	*
120.	170.	230. X 105.	3.31	3.00	.072	2.1	.1	*

********** CUSTOMER DIRECT SERVICE NETWORK **********

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E Q U A L F R I C T I O N D U C T D E S I G N (VER. 6.08)

This report was prepared on 08/24/20 at 13:45:43.

TRUNK DUCT INFORMATION

FRICTION LOSS : 100.00 (PASCALS PER 100 METERS)

MAXIMUM PRESSURE DROP : 42.09 (PASCALS)

SEC. NO.	EQUIV. DIAM. (MM.)	RECT. INSIDE DIMENSIONS (MM. X MM.)	DUCT VELOCITY ROUND (MPS)	DUCT VELOCITY RECT. (MPS)	DUCT CMS	FRICTION LOSSES (PASCALS)	FITTING LOSSES (PASCALS)	
100.	210.	195. X 195.	3.24	3.00	.108	4.4	1.0	*
110.	180.	165. X 165.	2.92	2.76	.072	1.5	.0	*
120.	140.	170. X 95.	2.46	2.27	.036	1.5	.0	*