

Mid-Michigan Line Card

PRODUCTS & SYSTEMS SOLUTIONS



Affiliated Products

Airtite

Radiant Ceiling Systems
www.armstrongceilings.com

Annexair

Custom Packaged DX Rooftops
www.annexair.com

ArcticChill

Modular Chillers / Magnetic Bearing
Chillers
www.arcticchillergroup.com

Bousquet

Custom AHU/Gas Fired Make Up Air Units
www.bousquet.ca

Broad

Absorption Chillers
www.broad.net

Bulldog

Heat Pumps
www.bulldogheatpump.com

Calmac

Thermal Battery Storage Systems
www.calmac.com

CDI

Curbs, Custom Accessories
www.CDI.com

ChangeAir

Classroom Units
www.changeair.com

ClimateWorx

Computer Room Units
www.climateworx.com

Dynamic Air Quality Solutions

Air Filtration
www.dynamicsqs.com

enVerid

HEPA Air Purifier
www.enverid.com

Envisor

Air Filtration
www.cityscapes.com

Filtrine

Specialty chillers
www.filtrine.com

YOUR SINGLE SOURCE SOLUTIONS PROVIDER

Trane Mid-Michigan

5335 Hill 23 Drive
Flint, MI 48507
Trane.com/flint

3350 Pine Tree Road
Lansing, MI 48911
Trane.com/lansing

Contact Us

866-462-0895

Office Hours

Monday - Friday
8:00 AM - 5:00 PM

Affiliated Products (Continued)

Genesis Air

Photo Catalytic Oxidation (PCO)
IAQ Solutions
www.genesisair.com

Haakon

Custom Air Handlers
www.haakon.com

Mitsubishi / Trane

VRF / Ductless Solutions
www.trane.com/ductless

MJC Air Rotation

Air Rotation Units, WC Modular Self Contained Units, Specialty Coatings
www.mjcinc.com/products

MultiAqua

Chilled Water Air Conditioning Systems
www.multiaqua.com

Napps

Compact Scroll Chillers
www.nappstech.com

Nimbus

Adiabatic Coolers
www.nimbus.cool

Phenomenal Aire

BiPolar Ionization
www.topproductinnovations.com

PoolPak

Pool Units
www.poolpak.com

RenewAire

Energy Recovery Ventilation
www.renewaire.com

Synexis

DHP Virus & Bacteria IAQ Solutions
www.synexis.com

Systecon

Packaged Pumping Systems / Chiller Plants
www.systecon.com

Tandem

Chillers
www.tandemchillers.com

Temspec

Classroom Units
www.temspec.com

Thermax

Absorption Chillers
www.thermaxglobal.com

Thybar

Curbs, Custom Accessories
www.thybar.com

Tutco

Custom Heat
www.tutco.com

United Cool Air

Precision cooling systems/Mod Self Contained
www.unitedcoolair.com

Weather-Rite

Direct and Indirect Fired AHU
www.weather-rite.com

Formulas

$$\text{Sensible Load (Btu/hr)} = 1.08 \times \text{cfm} \times \Delta T(\text{db})$$

(1.08 = Density x Specific Heat x 60 min/hr)

$$\text{Latent Load (Btu/hr)} = 0.68 \times \text{cfm} \times \Delta \text{ gr/lb(da)}$$

(0.68 = Density x Latent Heat of Vaporization
x 60 (min/hr) / 7000 gr/lbw)

$$\text{Total Refrigeration Load (Tons)} = \frac{4.5 \times \text{cfm} \times \Delta r \text{ (btu/lb(da))}}{12,000}$$

(4.5 = Density x 60 min/hr)

$$\text{Coil Load (Btu/hr)} = 500 \times \text{gpm} \times \Delta T$$

(500 = Specific Heat x Density x 60 min/hr)

$$\text{Pump Head (ft)} = \frac{2.31 \times \text{Pressure Drop (psi)}}{\text{Specific Gravity of fluid}}$$

$$\text{Pump Power (hp)} = \frac{\text{gpm} \times \text{Head (ft)} \times \text{S.G. of fluid}}{3960 \times \text{Efficiency}}$$

$$\text{Fan Power (hp)} = \frac{\text{cfm} \times \text{Static Pressure (in w.g.)}}{6356 \times \text{Efficiency}}$$

Conversions

1 Therm = 100,000 Btu = 100 cu ft of Natural Gas

1,000,000 Btu = 1,000 MBtu = 1 MMBtu

1 MCF = 10 CCF = 1,000 cu ft = 1,000,000 Btu

1 Ton = 12,000 Btu/hr

1 Therm = 29.3 kWh

1 kW = 3,413 Btu/hr = 3.413 MBh = 1,000 W

1 lb of steam = 1000 Btu

1 kWh = 3,413 Btu

1 Gallon of Fuel Oil #2 = 140,000 Btu

1 HP = 0.746 kW = 2,544 Btu/hr

7000 grains = 1lb mass water

1 lb of water vapor = 1076 Btu (latent heat of water vapor)

1 psi = 2.31 ft H₂O = 27.72 in. H₂O = 2.04 in Hg



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.