

# THERMON

HEATING SOLUTIONS FOR COMMERCIAL CONSTRUCTION







# THERMON'S SOLUTIONS FOR COMMERCIAL CONSTRUCTION

Thermon provides a complete solution for the commercial construction industry. Whether you need to protect equipment, maintain temperatures, or melt snow and ice from outdoor surfaces, we offer reliable products to keep your project running. For projects large or small, Thermon is committed to meeting your heating needs and ensuring a smooth and efficient installation of your heating system.

In addition, Thermon offers project assistance services ranging from simple product selection, computer-generated drawings with installation instructions, to complete turnkey packages.

## ***Thermon Featured Products for Commercial Construction***

- Trace Heaters
- Boilers and Calorifiers
- Environmental Air & Space Heating
- Temporary Power





# TRACE HEATERS

Thermon manufactures the widest variety of trace heating products in the world including self-regulating, parallel constant watt, series resistance and mineral insulated trace heaters.

## PIPING FREEZE PROTECTION APPLICATIONS

### FLX™ Self-Regulating Trace Heating

While an insulated pipe can withstand cold temperatures longer than an uninsulated pipe, eventually the contents of the pipe will cool to the temperature of the surrounding environment. FLX™ trace heaters are designed to provide freeze protection of metallic and nonmetallic pipes, tanks and equipment by replacing the heat lost through the thermal insulation into the air. FLX is rated for heat outputs of 10, 16, 26 and 33 W/m at 10°C (3, 5, 8 and 10 W/ft at 50°F) when powered at 110 to 120 Vac or 208 to 277 Vac.

- Self-regulating heat output
- Rugged and reliable
- Easy to design
- Easy to install
- Excellent for use on metallic and nonmetallic piping



## FIRE PROTECTION SYSTEMS

FLX™ is certified to IEEE 515.1 for use on Fire Protection System Piping feed mains, risers, and cross mains. This application approval includes piping which connects between buildings in unheated areas, piping located in unheated areas or piping through coolers or freezers. As with all heat traced piping systems, thermal insulation is required to ensure the heating system can compensate for heat losses.

Where above ground water-filled supply pipes, risers, system risers or feed mains pass through open areas, cold rooms, passageways, or other areas exposed to freezing temperatures, the pipe shall be protected against freezing in accordance with NPFA 13, "Standard for the Installation of Sprinkler Systems."



# SMALL & MEDIUM PIPING FREEZE PROTECTION APPLICATIONS

## DLX™ Self-Regulating Trace Heating

DLX™ protects small and medium diameter pipes from rupture and leakage caused by freezing conditions in light industrial and commercial applications. Available in 9 and 18 W/m nominal power outputs, DLX can be energized from 208 to 277 Vac. DLX is the reliable solution for your freeze protection requirements.

- Safe
- Easy to install
- Energy efficient
- Reliable



## HOT WATER TEMPERATURE MAINTENANCE APPLICATIONS

### HSX™ Self-Regulating Trace Heating

HSX™ maintains hot water at desired nominal temperatures without the need for costly recirculation systems. HSX operates at 208 Vac and has nominal maintenance temperatures of 41°C (105°F), 49°C (120°F), and 49°C (120°F).

- Reliable, self-regulating performance
- Saves water and energy
- Simplified design and installation
- Hot water temperatures are maintained without the need for thermostats







## SNOW AND ICE MELTING APPLICATIONS

### SnoTrace™ RGS™ Self-Regulating Trace Heating

**RGS™** is designed and approved specifically for roof and gutter applications. **RGS™** withstands direct exposure to harsh environmental conditions. RGS uses supply voltages of 110-120 or 208-277 Vac, and has a nominal power output of 39 W/m (12 W/ft) in snow and ice and 20 W/m (6 W/ft) in dry air.

- Self-regulating performance means increased power output when needed, when snow or ice is present, and decreased power output when exposed to dry air
- Simple installation using ordinary hand tools, cable roof fasteners and cable hangers for gutters and downspouts

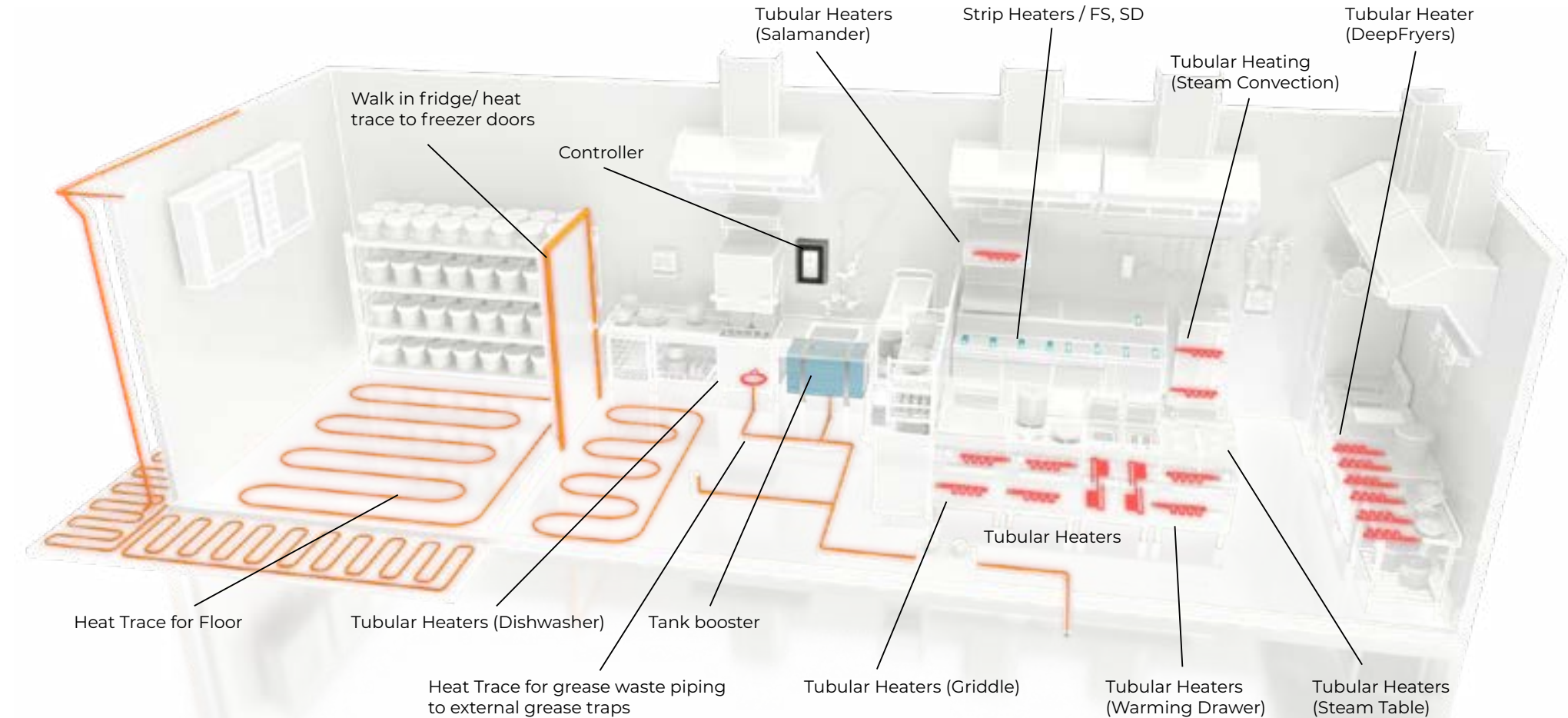
### SnoTrace™ KSR™ Self-Regulating Trace Heating

Self-regulating heating trace heaters have become the industry standard for snow and ice melting systems. **KSR™** offers high performance trace heating with cut-to-length parallel circuitry and can be easily adapted to variations in design for the job site. **KSR™** is specifically designed for direct burial in concrete and can even withstand the higher temperatures found with asphalt installations. KSR uses a supply voltage of 208-277 Vac and has a power output of 90 W/m (27 W/ft) @ 0 °C (32 °F) concrete surface temperature.

- Flexible and simple to design for stairs and complex layouts
- Durable construction designed for long-term operation







## FREEZER FLOOR FROST HEAVE PREVENTION

### FLX™ Self-Regulating Trace Heating

**FLX** trace heaters are run in conduit in the substrate to provide frost heave protection by maintaining the ground temperature above freezing.

**FLX** varies in vary heat output to compensate for the surrounding conditions. This self-regulating feature occurs along the entire length of a heat tracing circuit to ensure each point receives the required amount of heat while conserving energy.

- Self-regulating performance with easy design and installation for all applications
- Cut-to-length parallel circuitry allows field terminations

# COMMERCIAL TRACE HEATING CONTROL, MONITORING & ACCESSORIES

## CONTROL AND MONITORING

Thermon provides control systems that can range from a simple ambient sensing thermostat or a single snow sensor, to a sophisticated microprocessor-based monitoring system. Our control systems offer:

- Energy savings
- Reliability
- Alarm notification
- Centralized control
- Minimize energy cost



## ACCESSORIES

Thermon offers a complete line of accessories for its commercial trace heating products, including:

- Circuit fabrication kits, splice kits, and junction boxes
- End terminations, attachment tape, and caution labels
- Mechanical and control thermostats
- Snow and ice sensors

# BOILERS & CALORIFIERS

**Caloritech™ by Thermon** manufactures a wide variety of Boilers and Calorifiers including Circulation Heaters, Boiler Feed Pumps, Electric Steam Boilers, Hot Water Boilers and Condensate Receiver Package.

## HOT WATER BOILERS - TYPE VWB & HWB

Ideally suited for process heating, comfort heating, commercial dishwashers, radiant floor heating and carwash.

- Safe, quiet and reliable source of hot water
- Offered in 150 kW to 4950 kW with pressure ratings up to 2500 psig
- CSA approved, and designed and built to the latest version of the ASME code

## STEAM BOILERS - TYPE VSB & VWB

Designed for dry cleaning applications, chemical distillation, autoclaves, heating jacketed vessels and more. Fully packaged systems for safe, versatile and easy to use heat sources for low- or high-pressure steam. Caloritech™ boilers have low water volumes for rapid response.

- Offered in 9 kW to 5000 kW with pressure ratings up to 2500 psig
- CSA approved, and designed and built to the latest version of the ASME code
- Space saving vertical vessels and top mounted vertically positioned flange heaters (VSB only) to minimize scaling, conserve floor space and simplify maintenance
- Applications include chemical reactions and distillations, pipe tracing
- Water heating, laundries, kitchen equipment and hospital equipment sterilization







## PACKAGED CIRCULATION HEATERS - TYPE CWCB

Designed for installation in circulating systems where space is limited. Standard configurations include commercial swimming pool heaters, side arm domestic water heaters, commercial dishwasher booster heaters or commercial hot water furnaces for comfort or process heating.

- Offered in 6 kW to 60 kW with pressure ratings up to 125 psig
- Standard features include a galvanized shell, designed to the latest version of the ASME code, inlet, outlet, drain connections, heavy-duty copper sheathed flanged elements and a fully pre-wired control panel

## REPLACEMENT BOILER FLANGE HEATERS - TYPE CX

Designed as replacement parts for boilers.

- Available in a range of sizes and styles to suit the requirements of different boiler units, including rectangular flanges, square flanges and round flanges

## CALORIFIERS - TYPE HC & VC

- Type HCC & VCC (sprayed copper inner shell) is designed for high purity water
- Type HCG & VCG (galvanized steel inner shell) is designed for hard water storage
- Type HCF & VCF (uncoated steel shell) is designed for non-potable water heating
- Type VCS (stainless steel shell)

### Features:

- Available in a range of standard tank capacities and dimensions
- Tank weights range from 570 lbs (260 kg) to 3050 lbs (1380 kg)
- Standard features include a pressure relief valve, inlet water diffuser, temperature control thermostat, high limit thermostat, pressure gauge and 3" inspection opening, and optional manhole



# BOILER & CALORIFIER ACCESSORIES

## BLOW OFF TANKS - TYPE BOT

- Designed to capture condensate from high pressure boiler discharges
- Available up to 125 gal. (565 L)
- Pressure gauge and drain valve are standard

## SOLENOID FEED MECHANISM – TYPE SF

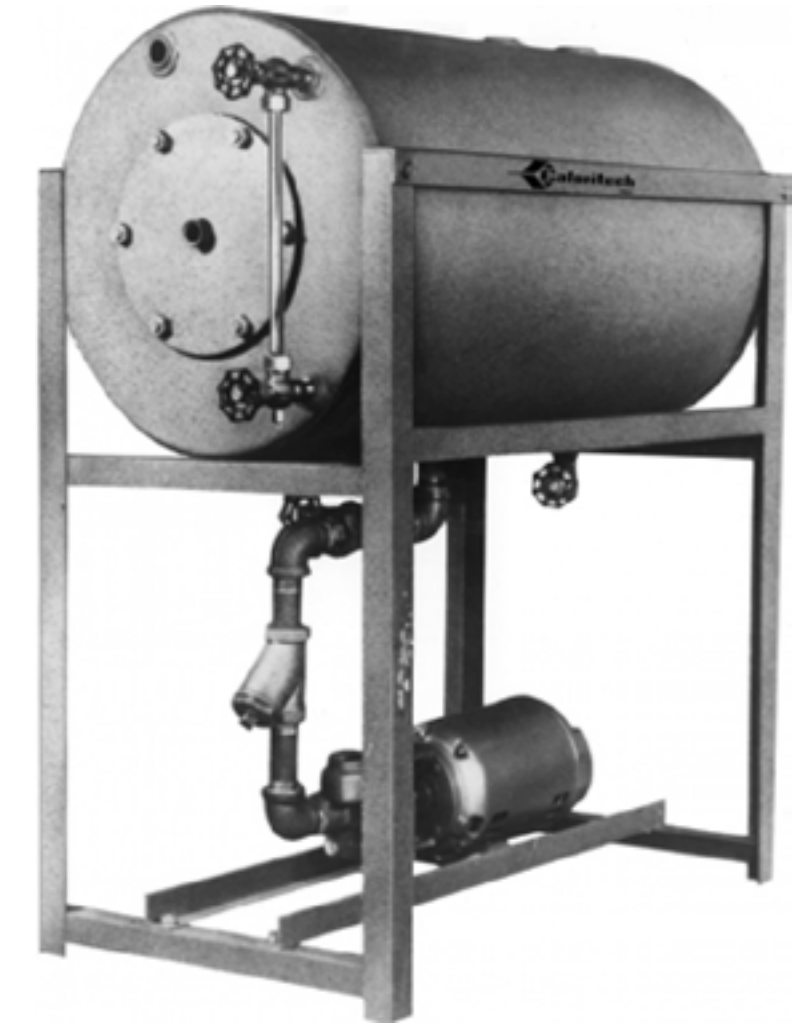
- Designed to augment boiler operation in closed systems when condensate is to be returned to the boiler

## BOILER FEED PUMP - TYPE BFP

- Designed to augment boiler operation if condensate is not required to be returned to the boiler and mains water pressure is not 10 psig or more above maximum boiler operating pressure

## CONDENSATE RECEIVER PACKAGES – TYPE CRP

- For closed loop systems where condensate is to be returned to the boiler
- Available up to 86 gal. (390 L) for boilers up to 990 kW
- Includes feed pump, make up water inlet with float control, sight glass, and shut off valve.



# ENVIRONMENTAL AIR & SPACE HEATING

## COMMERCIAL SPACE HEATING

Thermon provides a complete line of Regular Duty, Heavy Duty and Infrared Heaters designed for use in commercial space heating applications and process heating applications.

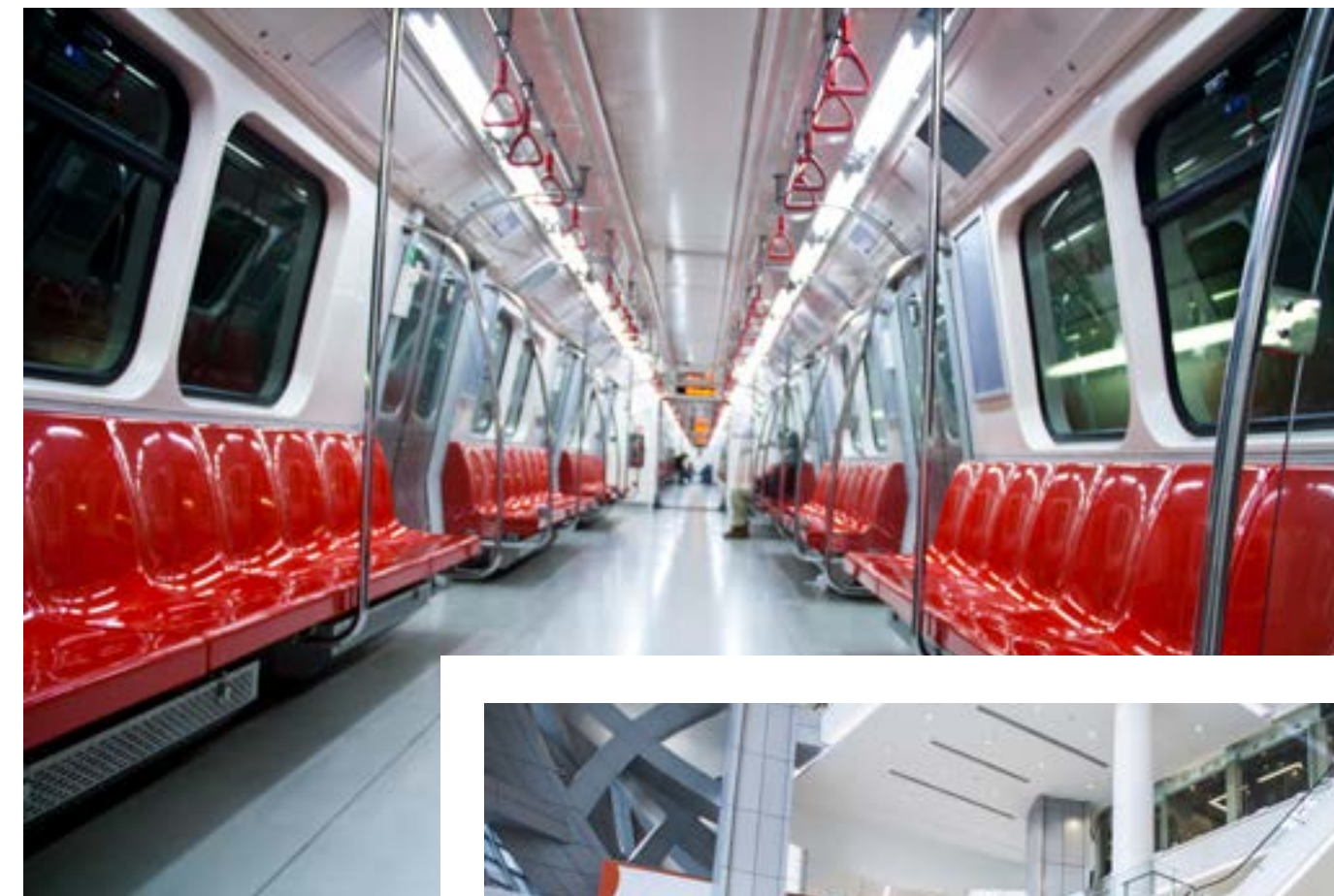
### BX - HEAVY-DUTY CONVECTION HEATER

The **Caloritech™ BX Heavy-Duty Convection Heater** is ideal for industrial applications where a rugged and dependable heat source is required, including factory offices, crane cabs, ticket booths, guard houses, repair shops, shipping rooms, trains and streetcars. Please note that this unit is not intended for use in hazardous locations.



### GE REGULAR DUTY FORCED AIR HEATER

The **GE Regular Duty Forced Air Heater** is intended for use in regular duty industrial and commercial space heating applications. This heater is ideal for use in factories, warehouses, parking garages, boiler rooms, arenas, grandstands, mechanical rooms, shopping malls, display areas, commercial storefronts, and more.







## INFRARED RADIANT HEATERS (OK SERIES AIR & SPACE HEATERS)

The major benefit of infrared heating is its ability to transfer heat to a person or object without heating the surrounding air.

- **Caloritech™ OKB Series Infrared Radiant Heaters** are designed for comfort heating in applications such as garages, indoor pools, canopies and patios.
- **Caloritech™ OKD Series Infrared Radiant Heaters** utilize a double reflector unit, emitting “twice the heat” and are designed for comfort heating in harder to reach areas such as large unheated factories, ice rinks and gymnasiums.
- **Caloritech™ OKH Series Infrared Radiant Heaters** utilize a deep reflector for better radiation at greater heights and are designed for comfort heating where a larger, more rugged unit is required such as factory workstations, isolated service booths, outdoor stadiums and high bay industrial buildings.



## RGE - REGULAR DUTY UNIT HEATER

**The Ruffneck™ RGE Regular Duty Unit Heater** is designed for use in regular duty industrial and commercial space heating applications. This heater is ideal for use in factories, warehouses, parking garages, boiler rooms, arenas, grandstands, mechanical rooms, shopping malls, display areas, commercial storefronts and more.



# TEMPORARY POWER FOR CONSTRUCTION



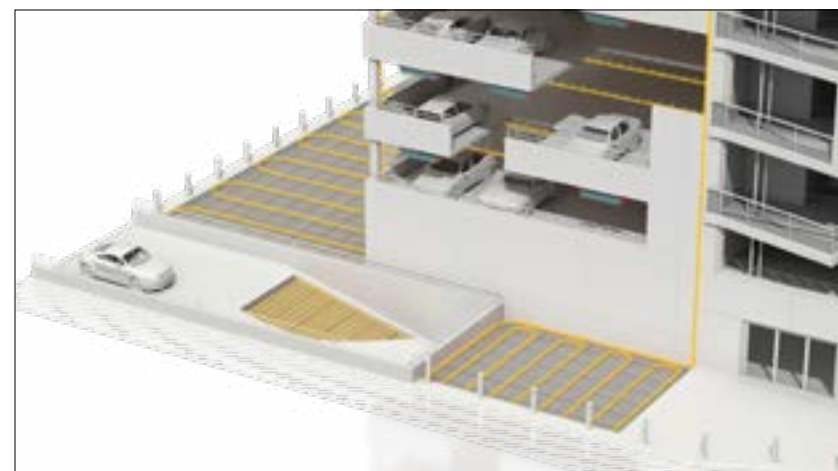
Thermon's power distribution equipment and lighting are suitable for large-scale capital construction projects, smaller industrial construction projects, brownfield construction projects and plant shutdowns and turnarounds. Our portable power distribution includes plug & play connectivity between devices, ensuring maximum safety and efficiency throughout the duration of your project. Our equipment is Nationally Recognized Testing Laboratories listed.

Our standard power distribution and lighting equipment is available for sale and for rent. Products include

- LED Task Light
- Light Tower
- Main Distribution Center Portable Power System
- Main Panel Portable Power System
- Plug & Play Cord Sets Portable Power System
- Remote Distribution Center Portable Power System
- Staghorn Panel
- Sub Panel Portable Power System

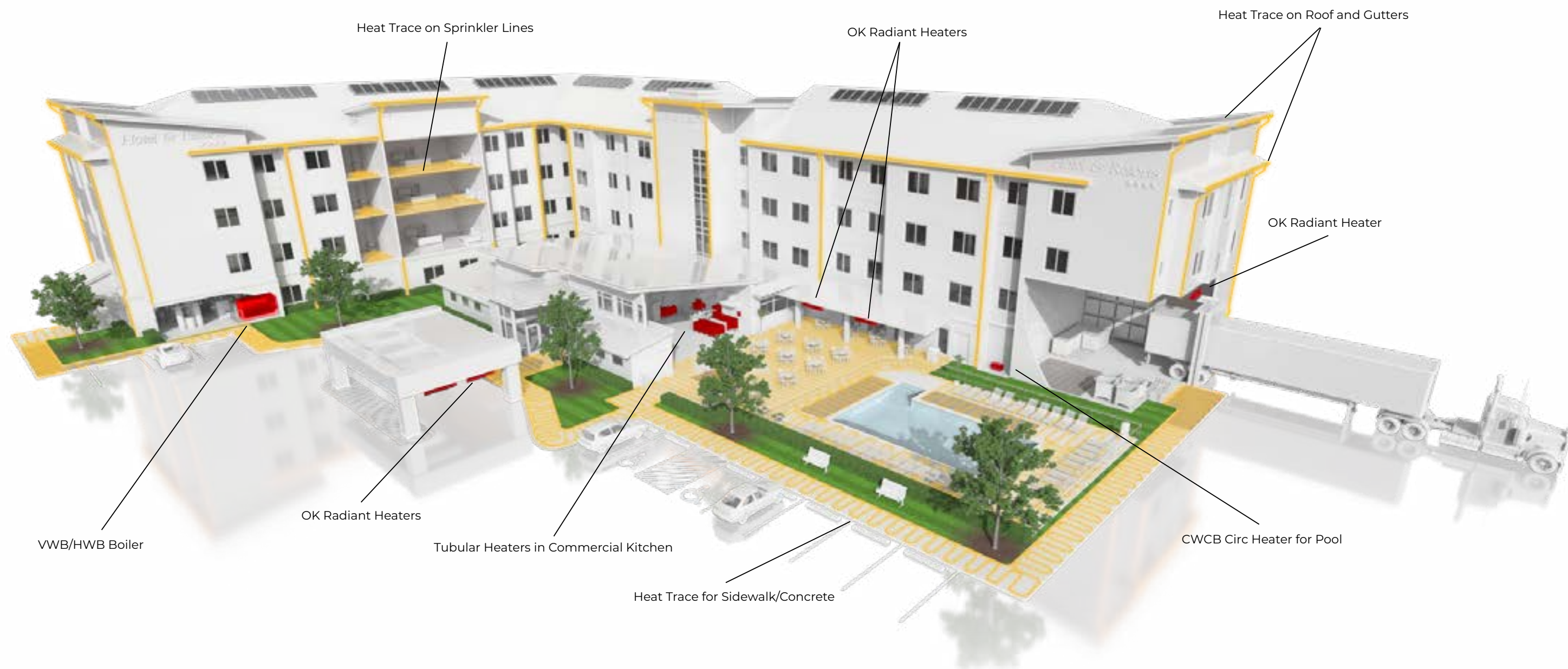


# SOLUTIONS FOR APARTMENT BUILDINGS



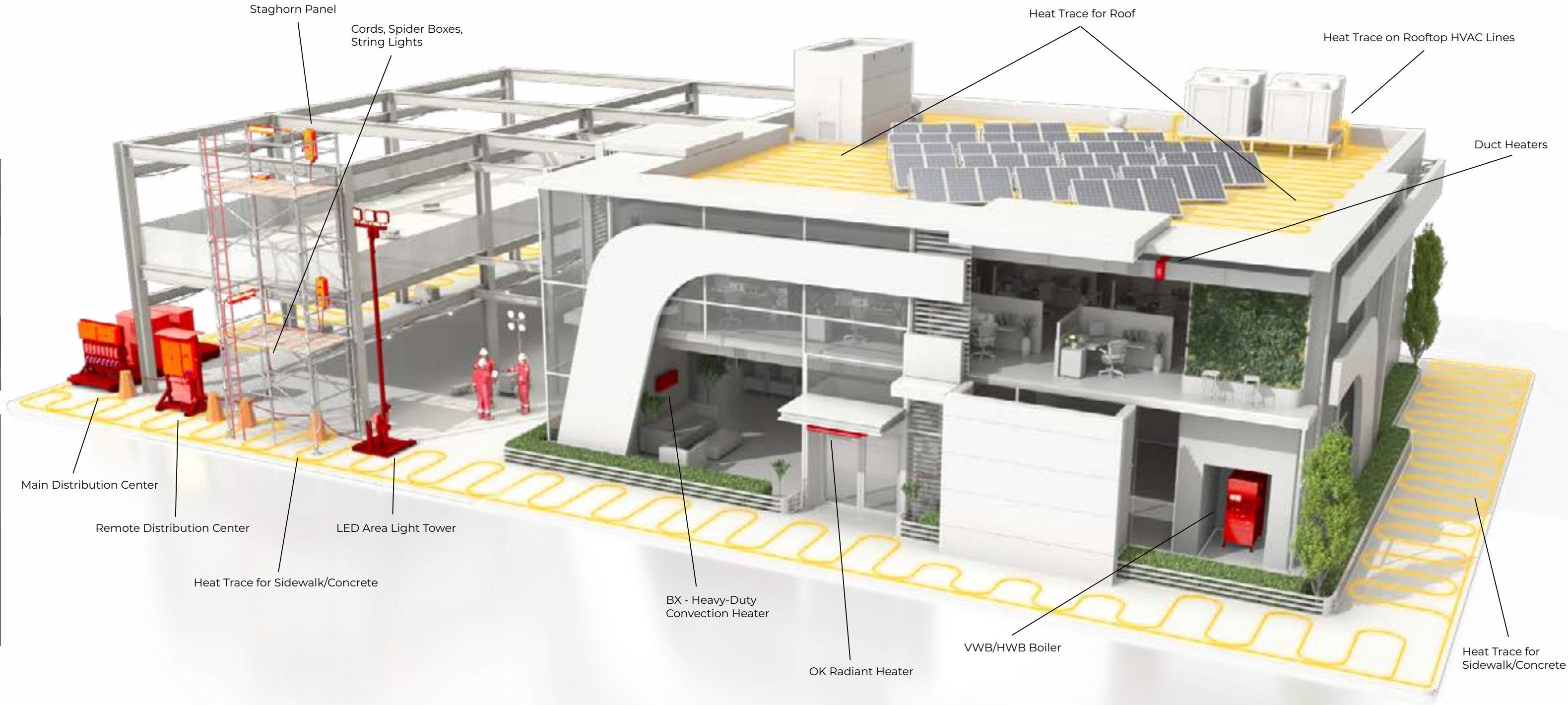


# SOLUTIONS FOR HOTELS

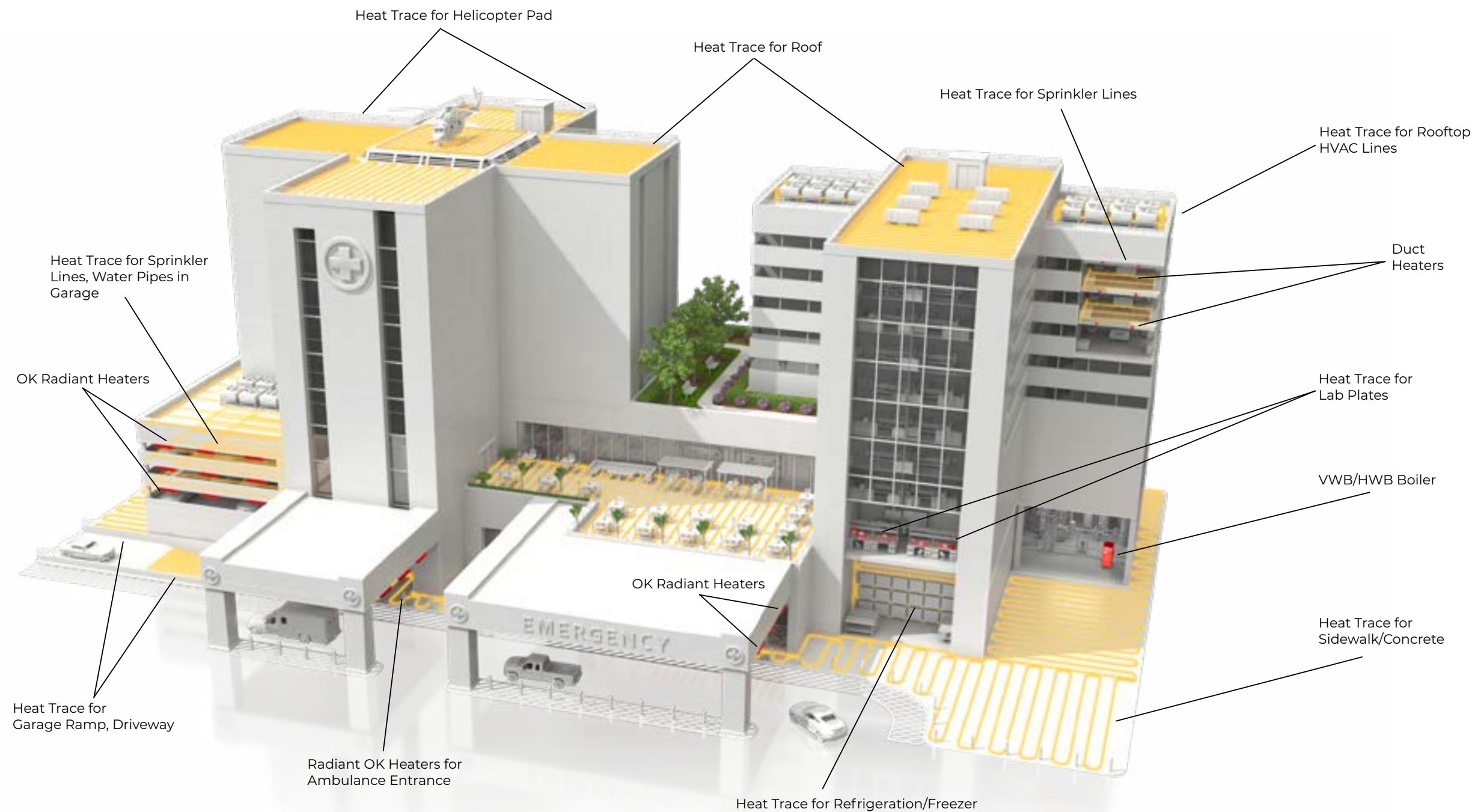




# SOLUTIONS FOR OFFICE BUILDINGS







# SOLUTIONS FOR HOSPITALS





# THERMON'S

## SOLUTIONS FOR COMMERCIAL CONSTRUCTION

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