

## Self-Regulating Heated Drainage Systems by TOPWET

TOPWET Flat Roof Drainage Systems manufactures drainage systems also in a heated version. The heating is provided by a NM-B 14-2 connection cable, which runs around the entire perimeter of the inlet and is then freely laid under the waterproofing membrane. The total length of the cable is 5 feet. The cable is self-regulating—the drains are equipped with a semiconductor heating system that adjusts its performance based on the surrounding temperature but cannot completely shut off on its own. The operating voltage is 110 V, 60 Hz, and no transformer is needed for connection.



[www.topwet.com](http://www.topwet.com)

Self-regulating electric heating for drains and through wall parapet drains ensures reliable drainage during winter. It works on the principle of resistance change between semiconductors depending on the surrounding temperature. Simply said, the lower the temperature around the inlet, the higher the heating output. The highest risk of blockage from ice occurs at temperatures around 32°F, when ice plugs from frost and snow can block the drains or even the entire pipe. The heating is designed to protect not only the outlet of the roof drain but also its immediate surroundings.

Self-regulating heated products have an "E" at the end of their name. We manufacture heated versions for roof drains (TWE), terrace drains (TWTE), renovation drains (TWE RETRO), balcony drains (TWBE), and through wall parapet drains (TWCE).



### When is it appropriate to use heated drains?

- For buildings at higher elevations and in areas with significant snowfall
- In cases where the drain is exposed to the exterior
- If there is no expectation of heat rising from the common sewer system

In general, we recommend always using heated products to prevent the risk of drain freezing.

### Advantages of Self-Regulating Heating:

- Reliable drainage even in winter
- Voltage 110 V / 60 Hz – no need for a transformer or control unit
- Can be connected to gutter heating, drains, driveways, etc.
- Simple connection using a switch or thermostat
- Energy savings

### Basic connection options for heated products:

- Without the option to turn off (energy consumption even during the summer season – not recommended)
- Mechanical switch (requires manual turning on and off) or a timer socket
- Internal thermostat in the distribution box with an outdoor temperature sensor, or alternatively an outdoor thermostat. The thermostat should ideally be set to turn on at +37°F. This means that once the temperature drops below this value, the thermostat will start heating the inlet and prevent freezing at dangerous temperatures around 32°F.

