

Selection Guide

In order to ensure that your channel tray installation will meet your present and future needs, a sequence of decisions must be made. These decisions are relatively simple and can be condensed down to 4 steps.

1. Material Choice

- Aluminum
- Pregalvanized
- Hot-dipped
- Stainless steel
- Coatings
- Other

2. Type of Tray Bottom

- Ventilated
- Solid

3. T&B Channel Tray Width

- 1.5 in.
- 3 in.
- 4 in.
- 6 in.

4. Fittings Selection

- Horizontal bends (90°, 60°, 45° and 30°)
- Horizontal tees and crosses
- Vertical bends (90°, 60°, 45° and 30°)

Each step is explained in detail on the following pages.

Selection Guide

.....

1. Material Choice

T&B Channel Tray systems are fabricated from a corrosion-resistant metal (low-carbon steel, stainless steel or an aluminum alloy) or from a metal with a corrosion-resistant finish (zinc or epoxy). The choice of material for any particular installation depends on the installation environment (corrosion and electrical considerations) and cost. Please refer to the technical section (pages A8 to A32) for further explanation.

2. Type of Channel Tray Bottom

Cable Channel

Thomas & Betts offers cable channel in solid or ventilated straight sections.

Ventilated channel has burr free oblong punched holes for easy access.

Ty-Rap® slots are provided between each opening for securing of cable.

Thomas & Betts channel tray meets NEMA VE-1 / CSA C22.22.



3. Select Channel Tray Width

The width of a channel tray is a function of the number, size, spacing and weight of the cables in the tray. Available nominal widths are 1.5, 3, 4 and 6 inches.

When specifying width, cable ties or other spacing devices may be used to maintain the required air space between cables.

4. Select the Fittings

Fittings are used to change the size or direction of the channel tray. The most important decision to be made in fitting design concerns radius. The radius of the bend, whether horizontal or vertical, can be zero (non-radius), 12 in., 24 in. or greater on a custom basis. The selection requires a compromise with the considerations being available space, minimum bending radius of cables, ease of cable pulling, and cost. The typical radius is 24 inches.

Fittings are also available for 30°, 45°, 60° and 90° angles. When a standard angle will not work, or adjustable elbows can be used. It may be necessary to add supports to the tray at these points.

Refer to CSA/NEMA VE2 Installation Guidelines for suggested support locations.