

## Grounding Connectors

Grounding

### Compression Method Grounding Connectors save 50 – 75% in time and labor costs.

- Eliminates exothermic welding
- Reduces time and labor costs
- Minimizes possibility of poor connections

Thomas & Betts introduces a method of compression to replace exothermic welding and its associated disadvantages. This compression method is designed to provide quick, reliable connections for grid grounding at significantly lower installed costs because compression connectors install in less time, in any weather, and are unaffected by moisture, reducing downtime. In addition, our compression connectors for grid grounding require no special training for installation. They are made of high-conductivity wrought and cast copper, and are used for connecting and tapping cross grid, loop lines and ground rods for direct burial or concrete embedded ground grid systems. The Thomas & Betts compression system uses standard electrical connector installation tools.



*This installation method results in a long-lasting low installed cost connection. you can install it and forget it.*

*Before compression, typical cable connector cross section of cable and connector consists of about 75% metal and 25% air. After Thomas & Betts method compression, the cross section shows 100% metal with virtually no air spaces.*

### Meets all applicable specifications

Thomas & Betts grid and ground rod connectors satisfy the requirements of CEC SECTION 10 for connecting to the Grounding Electrode System. They also meet the requirements of UL Std. 467, UL Std. 486 CSA Std. C22.2 No. 41 and CSA Std. C22.2 No. 65 being acceptable as grounding and bonding equipment suitable for direct burial. Thomas & Betts grid and ground rod connectors also satisfy the recommended practice for the selection of grounding connector joints described in IEEE 837 standard for qualifying permanent connections used in substation grounding.

The connectors conform to the following IEEE Standard 837 requirements:

- 350°C current cycling
- Freeze-thaw test
- Accelerated aging – nitric acid/salt spray
- Mechanical, tensile and electromagnetic force (EMF) criteria
- Install in any weather – cut downtime
- Enhance safety
- Easy to install – no special training



**TBM14M**

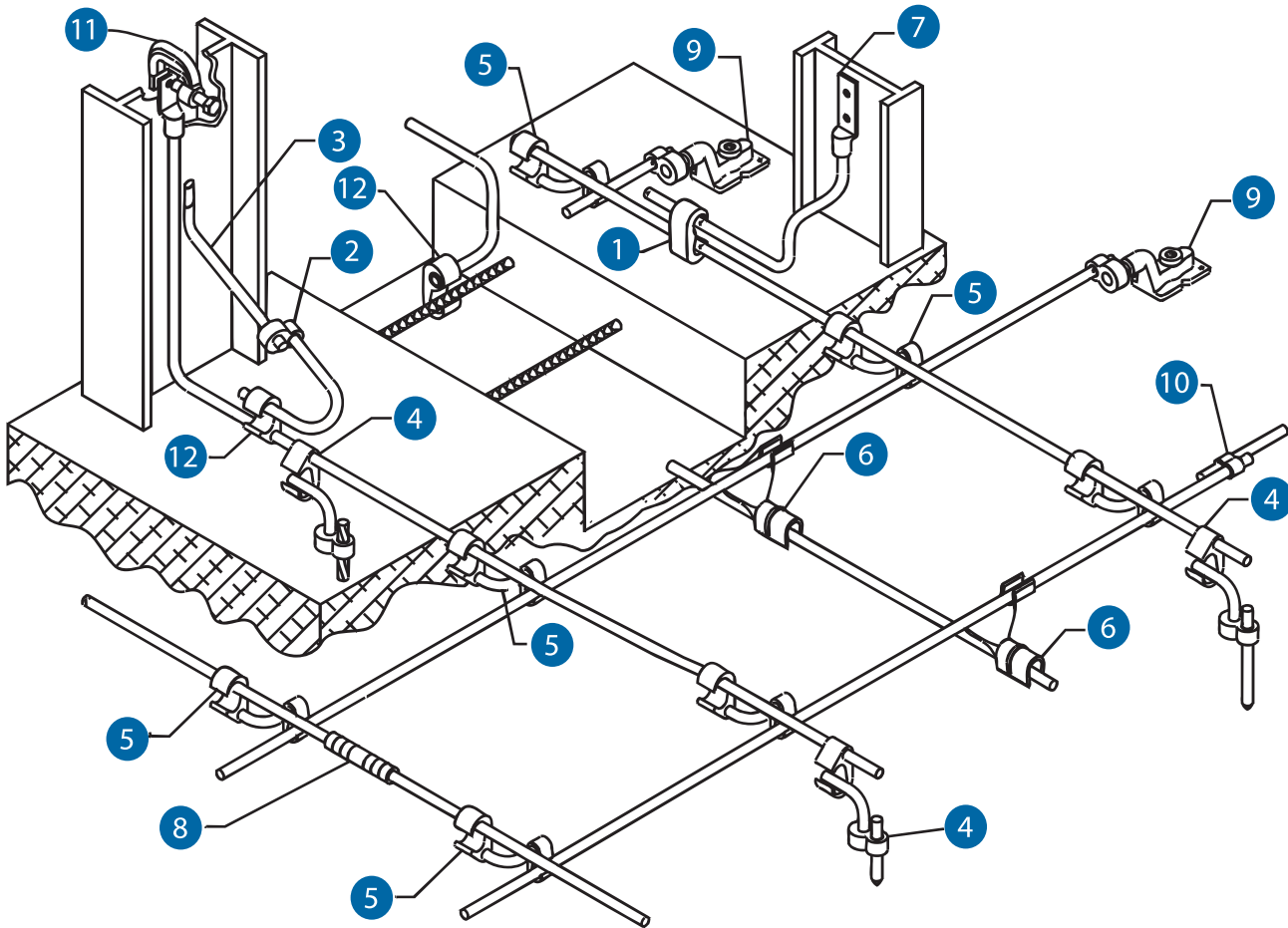
*(Suggested tool for E-Z-GROUND connectors to ground rods up to 5/8" diameter.)*

### Reliable installations through compression connections

Dies that are used in Thomas & Betts hand and hydraulic tools contain the "die code" numbers which are engraved on the compression surface of the die. Under compression, this number becomes embossed on the completed connection for inspection purposes.

The inspector compares the die code number embossed on the connector with the die table to ensure that the proper connector was compressed with the correct die for that particular size conductor.

**Grounding Connectors**



Thomas & Betts offers a complete line of grid-ground compression connectors. Our E-Z-Ground® connectors are designed for direct burial and offer a safe, efficient alternative to exothermic welding products. Grid ground installations do not require explosive charges, and can be installed in various climate conditions. These range-taking products will reduce the number of connectors and dies needed for your installation.

Thomas & Betts E-Z-Ground® products meet all applicable standards (IEEE837, UL467, CSA22.2). Connectors are prefilled with oxide inhibitors and sealed.

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|--|---|-------------------------------|
| <b>1</b> C-Taps                          | <b>5</b> Figure 6-6 Connectors          | <b>9</b> Ground Plate         |
| <b>2</b> Figure 8 Connector              | <b>6</b> GG Connectors (Grid to Ground) | <b>10</b> Figure 8 Connector  |
| <b>3</b> Steel Grounding Stud TBG Series | <b>7</b> Lug                            | <b>11</b> I-Beam Clamp        |
| <b>4</b> Figure 6-8 Connectors           | <b>8</b> Splice/Two-Way Connectors      | <b>12</b> Figure 6 Connectors |