

Telecommunications Bonding Backbone Interconnecting Bonding Conductor (TBBIBC)

The TBBIBC is a conductor that interconnects TBBs.

Telecommunications Main Grounding Busbar (TMGB)

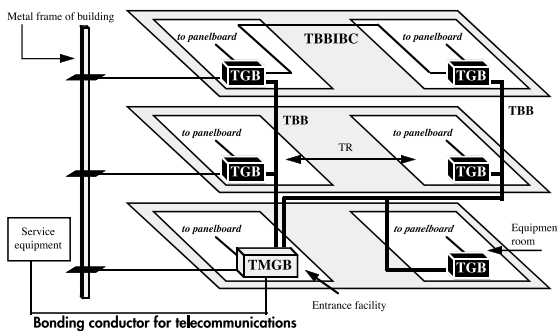
The TMGB serves as a dedicated extension of the building grounding electrode system for the telecommunications infrastructure. It also acts as the central connection point for TBBs and equipment.

The following TMGB design considerations must be remembered:

- There is typically one TMGB per building. The TMGB can be extended by using and following the rules for TGBs
- TMGB must be located so that it is accessible to telecommunications personnel. It is often located in the entrance room or the main telecommunications room. A location should be chosen that minimizes the bonding conductor length for telecommunication connections
- The TMGB must be a pre-drilled copper busbar with standard NEMA bolt hole sizing and spacing for the type and size of conductor being used
- TMGBs are a minimum of 6 mm (0.23 in.) in thickness, 100 mm (4 in.) wide and of variable length.

Ensure the size of the bar allows for future growth.

Telecommunications Grounding Busbar (TGB)



Scope of ANSI/TIA/EIA-607 (CSA T527)

Located in a telecommunications room or equipment room, it serves as a common central point of connection for telecommunications systems and equipment in the area served by that TR or equipment room.

TGB characteristics:

- Pre-drilled copper busbar provided with standard NEMA bolt hole sizing and spacing for type of connectors to be used
- Minimum size 6 mm (0.23 in.) thick by 50 mm (2 in.) wide, variable length.

TGB design considerations

- TBBs and other TGBs located in same space must be bonded to the TGB
- Bonding conductors used between a TBB and TGB must be continuous and routed in the shortest, straight-line path possible
- Install the TGB as close as practical to the panelboard
- When a panelboard for telecommunications is located in the same room as the TGB, bond the panelboard's ACEG bus (when equipped) or the enclosure to the TGB
- Bond the TGB to the TBBIBC where required.

Bonding to the Metal Frame of a Building

In those buildings where metal frames (structural steel) are effectively grounded, bond each TGB to the metal frame within the room using a No. 6 AWG conductor.

- If the metal frame is external to the room but readily accessible, bond the TGB to the metal frame using a No. 6 AWG conductor.