

CPI Grounding and Bonding Considerations:

A grounding and bonding system will aid in controlling negative influences such as electromagnetic interference, or electromagnetic pulse.

Bonding of metallic pathways, cable shields, conductors, and hardware at telecommunications rooms, equipment rooms, and entrance facilities are elements of the grounding and bonding system.

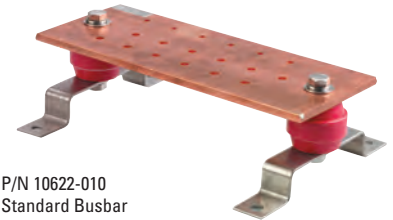
A ground (earth) reference should be in place for telecommunications systems within the telecommunications entrance facility, the equipment room and telecommunications rooms.

Grounding Checklist:

- ✓ Select a Busbar for each Equipment Room and Telecommunications Room with sufficient connections for equipment and the Telecommunications Grounding System
- ✓ Add Busbars to Racks and Cabinets that support equipment that requires bonding to the Telecommunications Grounding System (most network switches and some patch panels require grounding)
- ✓ Bond each Rack and Cabinet to the Busbar using Ground Wires, Jumpers & Straps
- ✓ Bond Cable Runway and Tray across splices and to the Busbar using Ground Wires, Jumpers & Straps (some UL Classified trays can be bonded with splice hardware)
- ✓ Bond raised floor pedestals bonded together and to the Busbar using Pedestal Clamps
- ✓ Use Joint Compound when making bonding connections between metal surfaces on Racks, Cabinets, Cable Runway, Cable Tray and Busbars.

CPI Busbars:

| Standard Busbars | |
|---|---|
| Includes: (1) Busbar, (2) Insulators, (2) Stand-off Brackets - 6.63"H x 3.13"D (168 mm x 80 mm), (4) stainless steel bolts with Torx T-45 head | |
| Part Number | Busbar Size |
| 10622-010 | 4"H x 10"W x 1/4"D (100 mm x 250 mm x 6.4 mm), has 1/4" holes for 9 each single-hole lugs |
| 10622-012 | 4"H x 12"W x 1/4"D (100 mm x 300 mm x 6.4 mm), has 7/16" holes for 9 each two-hole lugs with 3/4", 1" or 1-3/4" spacing |
| 10622-020 | 4"H x 20"W x 1/4"D (100 mm x 510 mm x 6.4 mm), has 7/16" holes, for 17 each two-hole lugs with 3/4", 1" or 1-3/4" spacing |



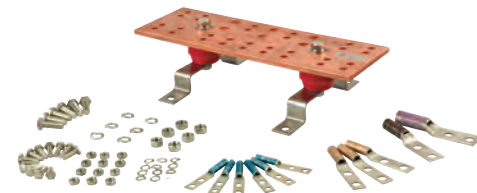
P/N 10622-010
Standard Busbar
4"H x 10"W, for single-holed lugs

| Busbar Insulator Assemblies | |
|--|----------------------|
| Pair Includes: (2) Stainless Steel 3/8"W x 5/8"L Bolts, (4) Lock Washers, (4) Flat Washers, (2) 3/8"W x 3/4"L Stainless Steel Bolts, Insulators, (2) 1"W Stainless Steel Wall Brackets with 1" standoff | |
| Part Number | Busbar Size |
| 10622-000 | Assembly Kit, 1 Pair |



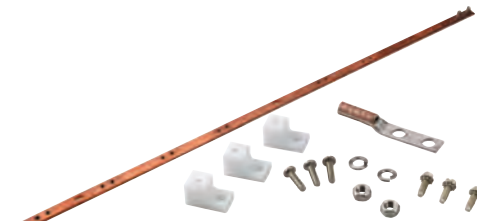
P/N 10622-000
Busbar Insulator Assemblies

| Busbar Assemblies with Lug Kits | | | | | |
|--|---|--------|--------|---------|---------|
| Busbar Assemblies with Lug Kits contain the CPI 13622 Series Telecommunications Grounding Busbar (TGB) or the CPI 40153 Series Telecommunications Main Grounding Busbar (TMGB) which have the TIA-607B recommended hole pattern | | | | | |
| Part Number | Busbar Size | #2 Lug | #6 Lug | 2/0 Lug | 4/0 Lug |
| 40156-012 | 2"H x 12"W x 1/4"D (50 mm x 300 mm x 6.4 mm), TGB, has 5/16" holes for 6 each two-hole lugs with 5/8" spacing and 7/16" holes for 3 each two-hole lugs with 1" spacing | 3 each | 6 each | 1 each | 0 |
| 40158-012 | 4"H x 12"W x 1/4"D (100 mm x 300 mm x 6.4 mm), TMGB, has 5/16" holes for 15 each two-hole lugs with 5/8" spacing and 7/16" holes for 3 each two-hole lugs with 1" spacing | 3 each | 6 each | 1 each | 1 each |
| 40158-020 | 4"H x 20"W x 1/4"D (100 mm x 510 mm x 6.4 mm), TMGB, has 5/16" holes for 27 each two-hole lugs with 5/8" spacing and 7/16" holes for 3 each two-hole lugs with 1" spacing | 3 each | 6 each | 1 each | 1 each |



P/N 40158-012
4"H x 12"W TMGB Busbar Assembly with Lugs

| Vertical Rack Busbar Kits | |
|---------------------------|--|
| Part Number | Busbar Size |
| 40160-036 | Vertical Rack Busbar: 5/8" x 1/4" x 36" (15.88 x 6.4 mm x 910 mm) Vertical Busbar has 1/4-20 threaded holes for 8 each two-hole lugs with 5/8" spacing and 1 pair of 5/16" studs for 1 each two-hole lug with 1" spacing. |
| 40160-072 | Vertical Rack Busbar: 5/8" x 1/4" x 72" (15.88 x 6.4 mm x 1830 mm) Vertical Busbar has 1/4-20 threaded holes for 13 each two-hole lugs with 5/8" spacing and 2 pair of 5/16" studs for 2 each two-hole lugs with 1" spacing. |
| 40161-036 | Vertical Rack Busbar Kit: 36" L Bar, Two-Hole Ground Compression Lug, Insulator Blocks, Hardware |
| 40161-072 | Vertical Rack Busbar Kit: 72" L Bar, Two-Hole Ground Compression Lug, Insulator Blocks, Hardware |



P/N 40161-036
Vertical Rack Busbar Kit, 36"L

Other sizes and finishes available. For more information, please contact CPI Technical Support at 1-800-834-4969.

US & Canada

+1-800-834-4969
Toronto, Ontario, Canada
+905-850-7770
chatsworth.com

Latin America

+52-55-5203-7525
Toll Free within Mexico
01-800-01-7592
chatsworth.com.co

Europe

+44-1628-524-834
chatsworthproducts.co.uk

Middle East & Africa

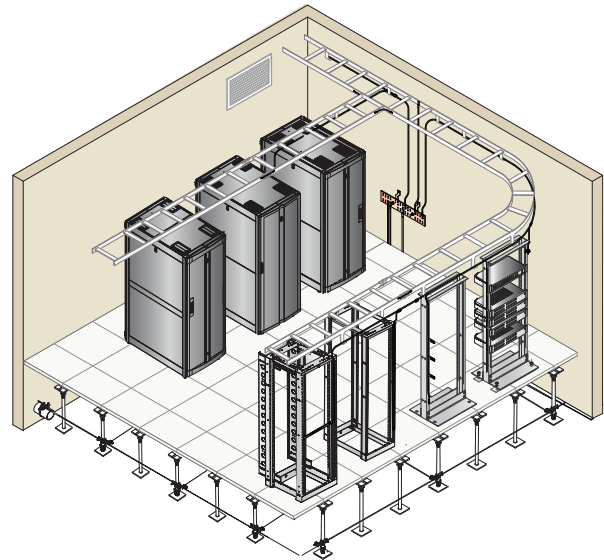
Dubai, UAE
+971-4-2602125
chatsworthproducts.co.uk

Asia Pacific

+86 21 6880-0266
chatsworth.com.cn

CPI Grounding and Bonding Features:

- Comprehensive line of products that promote electrical safety throughout the network
- A complete bonding solution with grounding busbars, pipe and floor pedestal clamps, insulators, joint compound, Compression tools and lugs/taps, as well as other equipment
- UL Listed and compliant with industry standards



| Insulators | | |
|-------------|-----------------------------------|-----|
| Part Number | Descriptions | Qty |
| 40157-001 | Rack Busbar Insulator Block | 1 |
| 40157-050 | Rack Busbar Insulator Block | 50 |
| 10605-019 | Rack Base Insulator Kit, 19" Rack | 1 |
| 10605-023 | Rack Base Insulator Kit, 23" Rack | 1 |
| 10842-001 | Cable Runway Insulator Bar Kit | 1 |
| 10842-010 | Cable Runway Insulator Bar Kit | 10 |

| Ground Terminal Blocks | | |
|------------------------|-------------------------|-----|
| Part Number | Descriptions | Qty |
| 08009-001 | One Mounting Hole Block | 1 |
| 08009-010 | One Mounting Hole Block | 10 |
| 40167-001 | Two Mounting Hole Block | 1 |
| 40167-010 | Two Mounting Hole Block | 10 |

| Compression Lugs | | | | |
|------------------|------------|--------------|-----------|------------|
| Part Number | Cable Size | Hole Spacing | Hole Size | Color Code |
| 40162-901 | #6 AWG | 5/8" | 1/4" | Blue |
| 40162-903 | #6 AWG | 1" | 3/8" | Blue |
| 40162-909 | 2/0 | 1" | 3/8" | Black |
| 40162-913 | #6 AWG | 1/2", 5/8" | 1/4" | Blue |

Other sizes and finishes available. C-Type Compression Taps are also available.

| Stand-Off Tie-Down "L" Brackets | | |
|---------------------------------|--|-----|
| Part Number | Descriptions | Qty |
| 10001-001 | 1" x 5" (30 mm x 130 mm) White Nylon | 1 |
| 10001-050 | 1" x 5" (30 mm x 130 mm) White Nylon | 50 |
| 10559-700 | 1" x 6" (30 mm x 150 mm) Aluminum, Blk | 1 |
| 10559-750 | 1" x 6" (30 mm x 150 mm) Aluminum, Blk | 50 |

| Pedestal Clamp with Grounding Connections | | | |
|---|----------|----------------------------|-------------------------------------|
| Part Number | Type | Pedestal Size/Style | Connections |
| 40169-001 | Cross | Square, 1-1/8" OD | (2) #6 AWG per side |
| 40169-002 | Cross | Round, 1-1/8 to 1-3/4" OD | (1) #6 AWG and (1) 2/0 per side |
| 40169-003 | Straight | Square or Round, 1-1/8" OD | (2) #6 AWG or (2) 2/0 one side only |

Other Pipe Clamps with Grounding Connectors are also available.

| Ground Wires, Jumpers & Straps | |
|--------------------------------|---|
| Part Number | Description |
| 40159-001 | Ground Wire, No Lugs, #6 AWG, 100'L |
| 40159-008 | Rack Ground Jumper Kit: 9'L #6 AWG Copper Conductor, Hex Nuts, Joint Compound, Each |
| 40159-009 | Ground Jumper, (1) Lug, #6 AWG, 9'L |
| 40159-010 | Equipment Ground Jumper Kit (2) Lugs, #6 AWG, 34"L |
| 40164-001 | Cable Runway Ground Strap, 8"L, #6 AWG |
| 40164-025 | Cable Runway Ground Strap, 8"L, #6 AWG, Pack of 25 |

| Joint Compound | | | |
|----------------|--|------|-----|
| Part Number | Description | Size | Qty |
| 40166-801 | Aluminum-to-Aluminum or Aluminum-to-Copper Antioxidant, Gray | 8 oz | 1 |
| 40166-812 | Aluminum-to-Aluminum or Aluminum-to-Copper Antioxidant, Gray | 8 oz | 12 |
| 40168-801 | Copper-to-Copper Antioxidant, Copper | 8 oz | 1 |
| 40168-812 | Copper-to-Copper Antioxidant, Copper | 8 oz | 12 |

