

CADRE
INDUSTRIES





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Central Office Power Cable – TelcoFlex®

- Cables feed d UL44 Type RHH, CSA
- FT4, VW-1 Flame Test
- Telcordia GR-347 Core
- 105C / 600V
- LSZH
- Central Office, Data Centers, Cell Towers

- L2 – No Cloth / Flex Stranding
- L3 – Cloth - NON-Flex Class B Stranding
- L4 – CLOTH – FLEX Class I Stranding



TelcoFlex® - Central Office Power Cable				
DESCRIPTION	PART # L2	PART # L3	PART # L4	UOM
14 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.014.COLOR	COP3.014.COLOR	COP4.014.COLOR	Per Foot
12 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.012.COLOR	COP3.012.COLOR	COP4.012.COLOR	Per Foot
10 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.010.COLOR	COP3.010.COLOR	COP4.010.COLOR	Per Foot
8 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.08.COLOR	COP3.08.COLOR	COP4.08.COLOR	Per Foot
6 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.06.COLOR	COP3.06.COLOR	COP4.06.COLOR	Per Foot
4 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.04.COLOR	COP3.04.COLOR	COP4.04.COLOR	Per Foot
2 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.02.COLOR	COP3.02.COLOR	COP4.02.COLOR	Per Foot
1 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.01.COLOR	COP3.01.COLOR	COP4.01.COLOR	Per Foot
1/0 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.10.COLOR	COP3.10.COLOR	COP4.10.COLOR	Per Foot
2/0 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.20.COLOR	COP3.20.COLOR	COP4.20.COLOR	Per Foot
4/0 AWG TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.40.COLOR	COP3.40.COLOR	COP4.40.COLOR	Per Foot
350 MCM TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.350.COLOR	COP3.350.COLOR	COP4.350.COLOR	Per Foot
500 MCM TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.500.COLOR	COP3.500.COLOR	COP4.500.COLOR	Per Foot
750 MCM TelcoFlex 105C - 600V CLASS-I TC RHH/LSZH	COP2.750.COLOR	COP3.750.COLOR	COP4.750.COLOR	Per Foot



Central Office Power Cable – RG Flex

- UL & CSA APPROVED
- LSZH
- RW90 & RHH/RHW
- FT4 & VW1 Flame Test
- GR347 & ATIS Compliant
- 90c / 600V

L2 – No Cloth / Flex Stranding

L3 – Cloth - NON-Flex Class B Stranding

L4 – CLOTH – FLEX Class I Stranding



DC Power / RG Flex Central Office Power Cable				
DESCRIPTION	PART # L2	PART # L3	PART # L4	UOM
14 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.14AWG.Color	DCP3.14AWG.Color	DCP4.14AWG.Color	Per Foot
12 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.12AWG.Color	DCP3.12AWG.Color	DCP4.12AWG.Color	Per Foot
10 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.10AWG.Color	DCP3.10AWG.Color	DCP4.10AWG.Color	Per Foot
8 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.8AWG.Color	DCP3.8AWG.Color	DCP4.8AWG.Color	Per Foot
6 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.6AWG.Color	DCP3.6AWG.Color	DCP4.6AWG.Color	Per Foot
4 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.4AWG.Color	DCP3.4AWG.Color	DCP4.4AWG.Color	Per Foot
2 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.2AWG.Color	DCP3.2AWG.Color	DCP4.2AWG.Color	Per Foot
1 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.1AWG.Color	DCP3.1AWG.Color	DCP4.1AWG.Color	Per Foot
1/0 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.1/0.Color	DCP3.1/0.Color	DCP4.1/0.Color	Per Foot
2/0 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.2/0.Color	DCP3.2/0.Color	DCP4.2/0.Color	Per Foot
4/0 AWG FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.4/0.Color	DCP3.4/0.Color	DCP4.4/0.Color	Per Foot
350 MCM FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.350.Color	DCP3.350.Color	DCP4.350.Color	Per Foot
500 MCM FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.500.Color	DCP3.500.Color	DCP4.500.Color	Per Foot
750 MCM FlexTel 90C - 600V CLASS-I TC RHH/LSZH	DCP2.750.Color	DCP3.750.Color	DCP4.750.Color	Per Foot

Battery Cable – UL3311/3279

- Battery Cable suitable interconnection between terminals, starters and Grounds
- Commonly used in welding, motor leads, internal wiring of appliances, UPS systems and motive power applications
- LSHF EPDM Jacket • Highly Flexible rope lay 30ga copper conductor • 600V • UL3311 – 90C, UL3279 – 105C, CL905 90C



Battery Cable - UL3311/3279			
DESCRIPTION	PART # BLACK	PART # RED	UOM
8 AWG UL 3311/3279 CSA CL905 600V	W.3311.08.Black	W.3311.08.Red	Per Foot
6 AWG UL 3311/3279 CSA CL905 600V	W.3311.06.Black	W.3311.06.Red	Per Foot
4 AWG UL 3311/3279 CSA CL905 600V	W.3311.04.Black	W.3311.04.Red	Per Foot
2 AWG UL 3311/3279 CSA CL905 600V	W.3311.02.Black	W.3311.02.Red	Per Foot
1 AWG UL 3311/3279 CSA CL905 600V	W.3311.01.Black	W.3311.01.Red	Per Foot
1/0 AWG UL 3311/3279 CSA CL905 600V	W.3311.10.Black	W.3311.10.Red	Per Foot
2/0 AWG UL 3311/3279 CSA CL905 600V	W.3311.20.Black	W.3311.20.Red	Per Foot
3/0 AWG UL 3311/3279 CSA CL905 600V	W.3311.30.Black	W.3311.30.Red	Per Foot
4/0 AWG UL 3311/3279 CSA CL905 600V	W.3311.40.Black	W.3311.40.Red	Per Foot

ALL-FLEX® - Multipurpose Power Cable

- Designed for internal/external applications including UPS Systems, transformers, controls, battery systems, leads
- Highly versatile multipurpose power cable
- Highly Flexible rope lay 30ga copper conductor
- UL and cRUus listed, CSA approved, ROHS Compliant
- 600v – FT1, FT2, FT4 and VW-1
- UL758, 1232, 1283, 1284, 1337, 1338, 1339, 1581, 2556, 10070 and 10269 – SAE J1127 TYPE SGT Part



All-Flex® Multipurpose Power Cable		
PART #	DESCRIPTION	UOM
W.1283BC.08.Color	8 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1283BC.06.Color	6 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1283BC.04.Color	4 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1283BC.02.Color	2 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.01.Color	1 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.10.Color	1/0 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.20.Color	2/0 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.30.Color	3/0 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.40.Color	4/0 AWG All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.250.Color	250 MCM All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.350.Color	350 MCM All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.500.Color	500 MCM All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.600.Color	600 MCM All-Flex MultiRated UL & CSA 600V/100V	Per Foot
W.1284BC.750.Color	750 MCM All-Flex MultiRated UL & CSA 600V/100V	Per Foot

THW-2 Grounding Wire

- ASTM Standards: B-3 (soft or annealed), B-8 (concentric lay stranded) ICEA S-95-658/NEMA WC-70 Federal Spec. A-A-59544
- 90°C Grounding Spec.
- Temperature Rated at 90°C Wet/Dry
- Flame Rated: VW-1
- Sunlight Resistant, Gasoline and Oil Resistant II RoHS Compliant



THW-2 Grounding Wire		
PART #	DESCRIPTION	UOM
W.THW-6.TC.Green	6 AWG THW-2 (7) TC Green Grounding	Per foot
W.THW-2.TC-Green	2 AWG THW-2 (7) TC Green Grounding	Per foot

electric-flex Conduit (Type LA)

- UL Listed
- Flexible PVC
- Flame Retardant
- Sunlight Resistant (UV)
- Marked HD for “Heavy-Duty”
- Resistant to Oils and Mild Acids



electri-flex Conduit (Type LA)		
PART #	DESCRIPTION	CARTON (ft)
Conduit.LA-010	3/8" UL Liqueatite	100 ft
Conduit.LA-011	1/2" UL Liqueatite	100 ft
Conduit.LA-012	3/4" UL Liqueatite	100 ft
Conduit.LA-013	1" UL Liqueatite	100 ft
Conduit.LA-014	1 1/4" UL Liqueatite	50 ft
Conduit.LA-015	1 1/2" UL Liqueatite	50 ft
Conduit.LA-016	2" UL Liqueatite	50 ft
Conduit.LA-017	2 1/2" UL Liqueatite	25 ft
Conduit.LA-018	3" UL Liqueatite	25 ft
Conduit.LA-019	4" UL Liqueatite	25 ft
Conduit.LA-350	3 1/2" UL Liqueatite	25 ft

electric-flex Conduit (Type NM)

- Listed and marked for outdoor use
- Listed and marked for direct burial and in poured concrete
- For containment of 1000 volt and lower potential circuits
- Installations in hazardous (classified) locations:

Class I Div. 2 Article 501 / Class II Div. 1 & 2 Article 502 / Class III Div. 1 & 2 Article 503



electri-flex Conduit (Type NM)		
PART #	DESCRIPTION	CARTON (ft)
Conduit.NM-010	3/8" UL Nonmetallic Liqueatite	100 ft
Conduit.NM-011	1/2" UL Nonmetallic Liqueatite	100 ft
Conduit.NM-012	3/4" UL Nonmetallic Liqueatite	100 ft
Conduit.NM-013	1" UL Nonmetallic Liqueatite	100 ft
Conduit.NM-014	1 1/4" UL Nonmetallic Liqueatite	100 ft
Conduit.NM-015	1 1/2" UL Nonmetallic Liqueatite	50 ft
Conduit.NM-016	2" UL Nonmetallic Liqueatite	50 ft

Angle Adapters



Angle Adapters provide an excellent attachment point to both angle and flat members. Available with 3/8" tapped mounting holes or 3/4" thru holes for snap-ins.

- Available in stainless steel and galvanized
- 3/8" Tapped holes and 3/4" thru holes
- 1" jaw opening

Stainless Steel Angle Adapters		
PART #	DESCRIPTION	QTY
HW.AA.SS.38	3/8" Tapped Hole	1 Pack of 10
HW.AA.SSI.34	3/4" Thru Hole (Insert Included)	1 Pack of 10
HW.AA.SS.34	3/4" Thru Hole	1 Pack of 10

Galvanized Angle Adapters		
PART #	DESCRIPTION	QTY
HW.AA.G.38	3/8" Tapped Hole	1 Pack of 10
HW.AA.GI.34	3/4" Thru Hole (Insert Included)	1 Pack of 10
HW.AA.G.34	3/4" Thru Hole	1 Pack of 10



Stand-Off Adapters

Stand-Off Adapters provide an attachment point to 1" and larger round members. Slotted holes accommodate 1/2" banding or hose clamps.

- Available in stainless steel and galvanized
- 3/8" Tapped holes and 3/4" thru holes
- Compatible with 1/2" banding



*Hose clamps not included. See page 5 for hose clamps

Stainless Steel Stand-Off Adapters		
PART #	DESCRIPTION	QTY
HW.SO.SS.38	3/8" Tapped Hole*	1 Pack of 10
HW.SO.SS.38.1-2	3/8" Tapped Hole, 1" - 2" OD Members	1 Pack of 10
HW.SO.SS.38.2-3	3/8" Tapped Hole, 2" - 3" OD Members	1 Pack of 10
HW.SO.SS.38.3-5	3/8" Tapped Hole, 3" - 5" OD Members	1 Pack of 10
HW.SO.SS..8.5-6	3/8" Tapped Hole, 5" - 6" OD Members	1 Pack of 10
HW.SO.SSI.34	3/4" Thru Hole (w/insert)*	1 Pack of 10
HW.SO.SSI.34.2-3	3/4" Thru Hole (w/ insert) 2" - 3" OD Members	1 Pack of 10
HW.SO.SSI.34.3-5	3/4" Thru Hole (w/ insert) 3" - 5" OD Members	1 Pack of 10
HW.SO.SSI.34.5-6	3/4" Thru Hole (w/ insert) 5" - 6" OD Members	1 Pack of 10
HW.SO.SS.34	3/4" Thru Hole*	1 Pack of 10
HW.SO.SS.34.2-3	3/4" Thru Hole, 2" - 3" OD Members	1 Pack of 10
HW.SO.SS.34.3-5	3/4" Thru Hole, 3" - 5" OD Members	1 Pack of 10
HW.SO.SS.34.5-6	3/4" Thru Hole, 5" - 6" OD Members	1 Pack of 10

Galvanized Stand-Off Adapters		
PART #	DESCRIPTION	QTY
HW.SO.G.38	3/8" Tapped Hole*	1 Pack of 10
HW.SO.G.38-1-2	3/8" Tapped Hole, 1" - 2" OD Members	1 Pack of 10
HW.SO.G.38-2-3	3/8" Tapped Hole, 2" - 3" OD Members	1 Pack of 10
HW.SO.G.38-3-5	3/8" Tapped Hole, 3" - 5" OD Members	1 Pack of 10
HW.SO.G.38-5-6	3/8" Tapped Hole, 5" - 6" OD Members	1 Pack of 10
HW.SO.GI.34	3/4" Thru Hole (w/insert) *	1 Pack of 10
HW.SO.GI.34-2-3	3/4" Thru Hole (w/insert) 2" - 3" OD Members	1 Pack of 10
HW.SO.GI.34-3-5	3/4" Thru Hole (w/insert) 3" - 5" OD Members	1 Pack of 10
HW.SO.GI.34-5-6	3/4" Thru Hole (w/insert) 5" - 6" OD Members	1 Pack of 10
HW.SO.G.34	3/4" Thru Hole*	1 Pack of 10
HW.SO.G.34-2-3	3/4" Thru Hole, 2" - 3" OD Members	1 Pack of 10
HW.SO.G.34-3-5	3/4" Thru Hole, 3" - 5" OD Members	1 Pack of 10
HW.SO.G.34-5-6	3/4" Thru Hole, 5" - 6" OD Members	1 Pack of 10

Butterfly Hangers



Butterfly Hangers provide a versatile means of attaching different types of cables to a variety of support members.

- **Manufactured from 304 Stainless Steel**
- **Compatible with corrugated, smooth wall coax and elliptical waveguide**
- **3/8" mounting hardware (optional)**

Butterfly Hangers		
PART #	DESCRIPTION	QTY
HW.BH.38-12	3/8" to 1/2" Coaxial Cable	1 Pack of 10
HW.BH.38-12NH	3/8" to 1/2" Coaxial Cable (no hardware)	1 Pack of 10
HW.BH.78	7/8" Coaxial Cable	1 Pack of 10
HW.BH.78NH	7/8" Coaxial Cable (no hardware)	1 Pack of 10
HW.BH.114	1-1/4" Coaxial Cable	1 Pack of 10
HW.BH.114NH	1-1/4" Coaxial Cable (no hardware)	1 Pack of 10
HW.BH.158	1-5/8" Coaxial Cable	1 Pack of 10
HW.BH.158NH	1-5/8" Coaxial Cable (no hardware)	1 Pack of 10
HW.BH.214	2-1/4" Coaxial Cable	1 Pack of 10
HW.BH.214NH	2-1/4" Coaxial Cable (no hardware)	1 Pack of 10

Snap-In Hangers

Flexible internal support fingers allow the Snap-In Hangers to be compatible with all brands of coaxial cables.

- **Manufactured from 304 Stainless Steel**
- **Special installation tool not required**
- **Internal support fingers absorb tower vibration**



Snap-In Hangers		
PART #	DESCRIPTION	QTY
HW.SH.12	Snap-In Hanger for 1/2" Cable and Hanger Insert	1 Pack of 10
HW.SH.58	Snap-In Hanger for 5/8" Cable and Hanger Insert	1 Pack of 10
HW.SH.78	Snap-In Hanger for 7/8" Cable and Hanger Insert	1 Pack of 10
HW.SH.114	Snap-In Hanger for 1-1/4" Cable and Hanger Insert	1 Pack of 10
HW.SH.158	Snap-In Hanger for 1-5/8" Cable and Hanger Insert	1 Pack of 10
HW.SH.214	Snap-In Hanger for 2-1/4" Cable and Hanger Insert	1 Pack of 10

Clamp Heads

Clamp Heads provide a versatile means to attach a variety of cable support products to round members.

- Compatible with hose clamps and 1/2" banding
- For use with 3/8" and 10 mm threaded rod
- Manufactured from 304 stainless steel

Clamp Heads		
PART #	DESCRIPTION	QTY
HW.CPHD	Clamp Head	1 Pack of 10



Clamp Head Hose Clamp Assemblies

Hose Clamp Kits		
PART #	DESCRIPTION	QTY
HW.HC.1-2	Clamp Head With 1"-2" Hose Clamp	1 Pack of 10
HW.HC.2-3	Clamp Head With 2"-3" Hose Clamp	1 Pack of 10
HW.HC.3-5	Clamp Head With 3"-5" Hose Clamp	1 Pack of 10
HW.HC.5-6	Clamp Head With 5"-6" Hose Clamp	1 Pack of 10
HW.HC.6-10	Clamp Head With 6"-10" Hose Clamp	1 Pack of 10
HW.HC.10-16	Clamp Head With 10"-16" Hose Clamp	1 Pack of 10



Cushion Hanger

Cushion Hangers		
PART #	DESCRIPTION	QTY
HW.CH.38.1	1 Hole for 3/8" Coaxial Cable	1 Pack of 5
HW.CH.38.3	3 Holes for 3/8" Coaxial Cable	1 Pack of 5
HW.CH.38.9	9 Holes for 3/8" Coaxial Cable	1 Pack of 5
HW.CH.12.1	1 Hole for 1/2" Coaxial Cable	1 Pack of 5
HW.CH.12.2	2 Holes for 1/2" Coaxial Cable	1 Pack of 5
HW.CH.12.3	3 Holes for 1/2" Coaxial Cable	1 Pack of 5
HW.CH.12.4	4 Holes for 1/2" Coaxial Cable	1 Pack of 5
HW.CH.12.5	5 Holes for 1/2" Coaxial Cable	1 Pack of 5
HW.CH.78.1	1 Hole for 7/8" Coaxial Cable	1 Pack of 5
HW.CH.78.2	2 Holes for 7/8" Coaxial Cable	1 Pack of 5
HW.CH.78.3	3 Holes for 7/8" Coaxial Cable	1 Pack of 5
HW.CH.78.4	4 Holes for 7/8" Coaxial Cable	1 Pack of 5
HW.CH.114.1	1 Hole for 1-1/4" Coaxial Cable	1 Pack of 5
HW.CH.158.1	1 Hole for 1-5/8" Coaxial Cable	1 Pack of 5
HW.CH.214.1	1 Hole for 2-1/4" Coaxial Cable	1 Pack of 5

Cushion Hangers are ideal for supporting coaxial cable and elliptical waveguide. Custom hole configurations available upon request.

- Elliptical waveguide sizes available
- Supports multiple runs of cable
- Kit includes hose clamp and clamp head
- Sold in kits of 5



Hose Clamps

Hose Clamps can be used to attach Stand-Off Adapters, Butterfly Hangers, Cushion Hangers, Angle Adapters and Clamp Heads directly to round members.

- All components manufactured from 304 stainless steel
- Other sizes available



Hose Clamp Kits		
PART #	DESCRIPTION	QTY
HW.HC.KIT.1-2	1"-2" OD Members	1 Pack of 10
HW.HC.KIT.2-3	2"-3" OD Members	1 Pack of 10
HW.HC.KIT.3-5	3"-5" OD Members	1 Pack of 10
HW.HC.KIT.5-6	5"-6" OD Members	1 Pack of 10
HW.HC.KIT.6-10	6"-10" OD Members	1 Pack of 10
HW.HC.KIT.10-16	10"-16" OD Members	1 Pack of 10

3 Way Stand-Off Adapters

Supports 3 Snap-in Hangers. Available with or without Hose Clamps.

- Can be used with 3/8" mounting hardware, with 1/2" banding or hose clamps
- Manufactured from 304 stainless steel



Three Way Stand-Off Adapters		
PART #	DESCRIPTION	QTY
HW.3WSO	Three Way Stand-Off*	1 Pack of 10
HW.3WSOA.1-2	Three Way Stand-Off Adapter for 1" - 2"	1 Pack of 10
HW.3WSOA.2-3	Three Way Stand-Off Adapter for 2" - 3"	1 Pack of 10
HW.3WSOA.3-5	Three Way Stand-Off Adapter for 3" - 5"	1 Pack of 10
HW.3WSOA.5-6	Three Way Stand-Off Adapter for 5" - 6"	1 Pack of 10

*Hose clamps not included.

Hook & Loop Rolls

Hook and loop rolls are sold in 1/2" and 3/4" widths. Rolls can be cut to desired lengths. Great for wire management and securing fiber optic cables.



Hooks & Loop Rolls		
PART #	DESCRIPTION	QTY
HL.BL.12-75F	Hook & Loop, 1/2" x 75' Roll	1 Roll
HL.BL.34-75F	Hook & Loop, 3/4" x 75' Roll	1 Roll

Hook & Loop Tie Wraps

Hook and loop tie wraps are pre-cut to variety of lengths and include secure loop for easy use. Great for wire management and securing fiber optic cables.



Tie Wrap Hook & Loops		
PART #	DESCRIPTION	QTY
HL.TWBL.128	Tie Wrap Hook & Loop, Black, 1/2" x 8"	1 Pack of 100
HL.TWBL.1212	Tie Wrap Hook & Loop, Black, 1/2" x 12"	1 Pack of 100
HL.TWBL.348	Tie Wrap Hook & Loop, Black, 3/4" x 8"	1 Pack of 100
HL.TWBL.3412	Tie Wrap Hook & Loop, black, 3/4" x 12"	1 Pack of 100

Cable Ties



Cable Ties		
PART #	DESCRIPTION	KIT QTY
HW.TWB450	Black UV Rated 50 lbs. Cable Tie 4"	1 Pack of 50
HW.TWB850	Black UV Rated 50 lbs. Cable Tie 8"	1 Pack of 50
HW.TWB8100	Black UV Rated 50 lbs. Cable Tie 8"	1 Pack of 100
HW.TWB450	Black UV Rated 120 lbs. Cable Tie 14"	1 Pack of 50
HW.TWB14100	Black UV Rated 120 lbs. Cable Tie 14"	1 Pack of 100

Acetal Banding Tool

Acetal banding installation tool



Banding Tool		
PART #	DESCRIPTION	QTY
TOOL.ABIT	Acetal Banding Installation Tool	1 Tool

Acetal Banding

Packaged in convenient 50' Rolls.



Acetal Banding		
PART #	DESCRIPTION	QTY
HW.Banding.12-50F	Acetal Banding, 1/2" x 50' Roll	1 Roll

Acetal Banding Locking Heads

Conveniently sold in individual qty or 25, 50 and 100 packs



Acetal Banding Locking Heads		
PART #	DESCRIPTION	QTY
HW.BAND.LH	Locking Head for 1/2" Acetal Banding (Single)	1 Locking Head
HW.BAND.LH.25	Locking Head for 1/2" Acetal Banding (25Pack)	1 Pack of 25
HW.BAND.LH.50	Locking Head for 1/2" Acetal Banding (50 Pack)	1 Pack of 50
HW.BAND.LH.100	Locking Head for 1/2" Acetal Banding (100 Pack)	1 Pack of 100

Stainless Steel Banding Tool

Stainless steel & cast iron construction standard duty banding tool.

- 2400lb Tension capacity
- Band widths of 1/4" - 3/4"
- Built-in banding cutter



Banding Tool		
PART #	DESCRIPTION	QTY
TOOL.BANDING	1/4" - 3/4" Banding Tool	1 Tool

Stainless Steel Banding

Packaged in convenient 100' Rolls.

- Manufactured from 304 Stainless Steel
- Sold in red plastic tote dispenser



Stainless Steel Banding		
PART #	DESCRIPTION	QTY
HW.BAND.SS.12-100F	Stainless Steel Banding, 1/2" x 100' Roll	1 Roll
HW.BAND.SS.34-100F	Stainless Steel Banding, 3/4" x 100' Roll	1 Roll

Stainless Steel Banding Buckles

Conveniently sold in 50 and 100 packs

- Secured with a tooth and ear design
- Manufactured from 304 Stainless Steel



Stainless Steel Banding Buckles		
PART #	DESCRIPTION	QTY
HW.BAND.SS.12-50	1/2" Banding Buckle, Stainless Steel	1 Pack of 50
HW.BAND.SS.12-100	1/2" Banding Buckle, Stainless Steel	1 Pack of 100
HW.BAND.SS.34-50	3/4" Banding Buckle, Stainless Steel	1 Pack of 50
HW.BAND.SS.34-100	3/4" Banding Buckle, Stainless Steel	1 Pack of 100

PIM Mitigation Snap-in Double Blocks



Snap Blocks easily snap into 3/4" ID mounting holes, providing cable support while eliminating a common source of PIM. PIM Blocks are stackable and re-adjustable.

- Manufactured from weather resistant polypropylene
- Insert manufactured from POM
- Reduces installation time
- US Patent No. 7,484,698

PIM Mitigation Snap Blocks		
PART #	DESCRIPTION	QTY
PIM.SBD.5-8	PIM Mitigation Snap-in Double Block 5mm-8mm Cable	1 Pack of 10
PIM.SBD.8-12	PIM Mitigation Snap-in Double Block 8mm-12mm Cable	1 Pack of 10
PIM.SBD.12-16	PIM Mitigation Snap-in Double Block 12mm-16mm Cable (1/2" Flex and 1/2" Standard Coax)	1 Pack of 10
PIM.DBS.78	PIM Mitigation Snap-in Double Block 7/8" Cable (Compatible with 7/8" inserts for variety of cable sizes)	1 Pack of 10

Metric Blocks

The Metric Blocks unique design allows them to support a range of cable diameters. Compatible with 3/8" or 10mm mounting hardware.

- Manufactured from weather resistant polypropylene
- Accommodates 3/8" and 10mm Hardware
- Ideal for electrical wire or fiber cable



Metric Blocks		
PART #	DESCRIPTION	QTY
HW.DBLOCK.5-8	Double Block for 5mm to 8mm OD cable	1 Pack of 10
HW.DBLOCK.8-12	Double Block for 8mm to 12mm OD cable	1 Pack of 10
HW.DBLOCK.12-16	Double Block for 12mm to 16mm OD cable	1 Pack of 10

Snap Blocks

Snap Blocks easily snap into 3/4" ID mounting holes providing a solid base which reduces lateral movement. Blocks are stackable and re-adjustable.

- Manufactured from weather resistant polypropylene
- Insert manufactured from 304 Stainless Steel
- Reduces installation time
- US Patent No. 7,484,698



Snap Blocks		
PART #	DESCRIPTION	QTY
HW.SBD.12	Snap Block for 1/2" Coaxial Cable, Double Run	1 Pack of 10
HW.SBD.78	Snap Block for 7/8" Coaxial Cable, Double Run	1 Pack of 10
HW.SBD.114	Snap Block for 1-1/4" Coaxial Cable, Double Run	1 Pack of 10
HW.SBD.158	Snap Block for 1-5/8" Coaxial Cable, Double Run	1 Pack of 10

Coax Blocks



Coax Blocks are available in both single and double run designs. The robust design allows up to 6 runs of cable to be supported in one compact bundle.

- Weather-resistant polypropylene
- Interior gripping teeth
- Exterior alignment ridges

Single Run Coax Blocks			Double Run Coax Blocks		
PART #	DESCRIPTION	QTY	PART #	DESCRIPTION	QTY
HW.CBS.12	Block for 1/2" Coaxial Cable, Single Run	1 Pack of 10	HW.CBD.12	Block for 1/2" Coaxial Cable, Double Run	1 Pack of 10
HW.CBS.58	Block for 5/8" Coaxial Cable, Single Run	1 Pack of 10	HW.CBD.58	Block for 5/8" Coaxial Cable, Double Run	1 Pack of 10
HW.CBS.78	Block for 7/8" Coaxial Cable, Single Run	1 Pack of 10	HW.CBD.78	Block for 7/8" Coaxial Cable, Double Run	1 Pack of 10
HW.CBS.114	Block for 1-1/4" Coaxial Cable, Single Run	1 Pack of 10	HW.CBD.114	Block for 1-1/4" Coaxial Cable, Double Run	1 Pack of 10
HW.CBS.158	Block for 1-5/8" Coaxial Cable, Single Run	1 Pack of 10	HW.CBD.158	Block for 1-5/8" Coaxial Cable, Double Run	1 Pack of 10
HW.CBS.214	Block for 2-1/4" Coaxial Cable, Single Run	1 Pack of 10	HW.CBD.214	Block for 2-1/4" Coaxial Cable, Double Run	1 Pack of 10

Universal Hanger Inserts

Our 8 different flexible rib design inserts will accommodate up to a 4mm-40mm OD cable. Manufactured from UV resistant EPDM rubber.

- Flexible support ribs
- Manufactured from UV resistant EPDM rubber
- Compatible with standard coaxial cable support products
- US Patent No. 9,407,078

NOTE: For hole configurations see page 53



Universal Hanger Inserts			
PART #	DESCRIPTION	HANGER SIZE	QTY
HW.HIU.4-10	Insert for 4mm-10mm (0.16"-0.39") OD Cable	1/2"	1 Pack of 10
HW.HIU.6-13	Insert for 6mm-13mm (0.24"-0.51") OD Cable	7/8"	1 Pack of 10
HW.HIU.13-18	Insert for 13mm-18mm (0.51"-0.71") OD Cable	7/8"	1 Pack of 10
HW.HIU.10-20	Insert for 10mm-20mm (0.39"-0.79") OD Cable	1-1/4"	1 Pack of 10
HW.HIU.3x6-13	Insert for 3 x 6mm - 13mm (3 x 0.24" - 0.51") OD Cable	1-5/8"	1 Pack of 10
HW.HIU.17-22	Insert for 17mm-22mm (0.67"-0.87") OD Cable	1-5/8"	1 Pack of 10
HW.HIU.22-31	Insert for 22mm-31mm (0.87"-1.22") OD Cable	1-5/8"	1 Pack of 10
HW.HIU.30-40	Insert for 30mm-40mm (1.18"-1.58") OD Cable	2-1/4"	1 Pack of 10

Single Hole Hanger Inserts

Manufactured from UV resistant EPDM rubber. Single hole Hanger Inserts are designed to support a variety of cable sizes.

- Manufactured from UV resistant EPDM rubber
- Compatible with standard coaxial cable support products
- Custom hole configurations available upon request

NOTE: For hole configurations see page 54



Single Hole Hanger Inserts			
PART #	DESCRIPTION	HANGER SIZE	QTY
HW.HI.171	Hanger Insert (1) x 17mm (1 x 0.67")	7/8"	1 Pack of 10
HW.HI.201	Hanger Insert (1) x 20mm (1 x 0.79")	7/8"	1 Pack of 10
HW.HI.241	Hanger Insert (1) x 24mm (1 x 0.94")	1-1/4"	1 Pack of 10
HW.HI.261	Hanger Insert (1) x 26mm (1 x 1.02")	1-1/4"	1 Pack of 10
HW.HI.301	Hanger Insert (1) x 30mm (1 x 1.18")	1-5/8"	1 Pack of 10
HW.HI.331	Hanger Insert (1) x 33mm (1 x 1.29")	1-5/8"	1 Pack of 10
HW.HI.361	Hanger Insert (1) x 36mm (1 x 1.41")	1-5/8"	1 Pack of 10
HW.HI.401	Hanger Insert (1) x 40mm (1 x 1.57")	1-5/8"	1 Pack of 10
HW.HI.431	Hanger Insert (1) x 43mm (1 x 1.70")	1-5/8"	1 Pack of 10

Wide Range Universal Hanger Inserts

Our 4 different flexible rib design inserts will accommodate up to 4mm – 45mm OD cable. Each insert provides a wider range of cable OD's and hanger inserts.

- Flexible support ribs
- Manufactured from UV resistant EPDM rubber
- Compatible with standard coaxial cable support products
- US Patent No. 9,407,078



NOTE: For hole configurations see page 54

Wide Range Universal Hanger Inserts			
PART #	Description	Hanger Size	QTY
HW.HIU.4-15	Insert for 4mm-15mm (0.16"-0.59") OD Cable	7/8"	1 Pack of 10
HW.HIU.14-25	Insert for 14mm-25mm (0.55"-0.98") OD Cable	1-1/4"	1 Pack of 10
HW.HIU.20-36	Insert for 20mm-36mm (0.78"-1.41") OD Cable	1-5/8"	1 Pack of 10
HW.HIU.25-45	Insert for 25mm-45mm (0.98"-1.77") OD Cable	2-1/4"	1 Pack of 10

Multi Hole Hanger Inserts

Manufactured from UV resistant EPDM rubber. Multi Hole Hanger Inserts are designed to support a variety of cable sizes and combinations.

- Compatible with standard coaxial cable support products
- Custom hole configurations available upon request



NOTE: For hole configurations see page 54

Multi Hole Hanger Inserts			
PART #	DESCRIPTION	HANGER SIZE	QTY
HW.HIM.2.11-1.7	(2) x 11mm & (1) x 7mm (2 x 0.43" & 1 x 0.28")	1-1/4"	1 Pack of 10
HW.HIM.2.14-1.7	(2) x 14mm & (1) x 7mm (2 x 0.55" & 1 x 0.28")	1-1/4"	1 Pack of 10
HW.HIM.2.10-2.7	(2) x 10mm & (2) x 7mm (2 x 0.39" & 2 x 0.28")	1-1/4"	1 Pack of 10
HW.HIM.2.13-2.7	(2) x 13mm & (2) x 7mm (2 x 0.51" & 2 x 0.28")	1-1/4"	1 Pack of 10
HW.HIM.2.15-4.7	(2) x 15mm & (4) x 7mm (2 x 0.59" & 4 x 0.28")	1-1/4"	1 Pack of 10
HW.HIM.1.23.35-1.7	(1) 23mm-35mm & (1) 7mm (1 x 0.90"-1.38" & 1 x 0.28")	1-5/8"	1 Pack of 10
HW.HIM.1.24-1.10	(1) x 24mm & (1) x 10mm (1 x 0.94" & 1 x 0.39")	1-5/8"	1 Pack of 10
HW.HIM.4.11-4.7	(4) x 11mm & (4) x 7mm (4 x 0.43" & 4 x 0.28")	1-5/8"	1 Pack of 10
HW.HIM.2.20-1.10	(2) x 20mm & (1) x 10mm (2 x 0.79" & 1 x 0.39")	1-5/8"	1 Pack of 10
HW.HIM.6.8.10.12.14.26	6, 8, 10, 12, 14 & 26mm (1x 0.24", 1x 0.31" 1x 0.39", 1x 0.47" 1x 0.55", 1x 1.02")	1-5/8"	1 Pack of 10
HW.HIM.4.11-2.16	(4) x 11mm & (2) x 16mm (4 x 0.43" & 2 x 0.63")	1-5/8"	1 Pack of 10
HW.HIM.7.11	(7) x 11mm (7 x 0.43")	1-5/8"	1 Pack of 10
HW.HIM.2.20	(2) x 20mm (2 x 0.79")	1-5/8"	1 Pack of 10
HW.HIM.4.16	(4) x 16mm (4 x 0.63")	1-5/8"	1 Pack of 10

Entry Boots



Available in both 4" and 5" sizes. Compatible with all standard entry boot cushions.

- Manufactured from UV resistant EPDM rubber
- Seals against moisture and dust ingress
- Custom insert cushions available

4" Entry Boot Kits		
PART #	DESCRIPTION	QTY
EB.4	4" Entry Boot (Cushion Not Included)	1 Boot
EB.4.1.38	4" Cushion 1 Hole for 3/8" OD Cable	1 Boot Assembly
EB.4.3.38	4" Cushion 3 Holes for 3/8" OD Cable	1 Boot Assembly
EB.4.4.38	4" Cushion 4 Holes for 3/8" OD Cable	1 Boot Assembly
EB.4.5.38	4" Cushion 5 Holes for 3/8" OD Cable	1 Boot Assembly
EB.4.9.38	4" Cushion 9 Holes for 3/8" OD Cable	1 Boot Assembly
EB.4.1.12	4" Cushion 1 Hole for 1/2" OD Cable	1 Boot Assembly
EB.4.2.12	4" Cushion 2 Holes for 1/2" OD Cable	1 Boot Assembly
EB.4.3.12	4" Cushion 3 Holes for 1/2" OD Cable	1 Boot Assembly
EB.4.4.12	4" Cushion 4 Holes for 1/2" OD Cable	1 Boot Assembly
EB.4.5.12	4" Cushion 5 Holes for 1/2" OD Cable	1 Boot Assembly
EB.4.9.12	4" Cushion 9 Holes for 1/2" OD Cable	1 Boot Assembly
EB.4.1.58	4" Cushion 1 Hole for 5/8" OD Cable	1 Boot Assembly
EB.4.2.58	4" Cushion 2 Hole for 5/8" OD Cable	1 Boot Assembly
EB.4.3.58	4" Cushion 3 Hole for 5/8" OD Cable	1 Boot Assembly
EB.4.1.78	4" Cushion 1 Hole for 7/8" OD Cable	1 Boot Assembly
EB.4.2.78	4" Cushion 2 Holes for 7/8" OD Cable	1 Boot Assembly
EB.4.3.78	4" Cushion 3 Holes for 7/8" OD Cable	1 Boot Assembly
EB.4.4.78	4" Cushion 4 Holes for 7/8" OD Cable	1 Boot Assembly
EB.4.1.114	4" Cushion 1 Hole for 1-1/4" OD Cable	1 Boot Assembly
EB.4.1.158	4" Cushion 1 Hole for 1-5/8" OD Cable	1 Boot Assembly
EB.4.1.214	4" Cushion 1 Hole for 2-1/4" OD Cable	1 Boot Assembly

5" Entry Boot Kits		
PART #	DESCRIPTION	QTY
EB.5	5" Entry Boot (Cushion Not Included)	1 Boot
EB.5.1.38	5" Cushion 1 Hole for 3/8" OD Cable	1 Boot Assembly
EB.5.3.38	5" Cushion 3 Holes for 3/8" OD Cable	1 Boot Assembly
EB.5.4.38	5" Cushion 4 Holes for 3/8" OD Cable	1 Boot Assembly
EB.5.5.38	5" Cushion 5 Holes for 3/8" OD Cable	1 Boot Assembly
EB.5.9.38	5" Cushion 9 Holes for 3/8" OD Cable	1 Boot Assembly
EB.5.1.12	5" Cushion 1 Hole for 1/2" OD Cable	1 Boot Assembly
EB.5.2.12	5" Cushion 2 Holes for 1/2" OD Cable	1 Boot Assembly
EB.5.3.12	5" Cushion 3 Holes for 1/2" OD Cable	1 Boot Assembly
EB.5.4.12	5" Cushion 4 Holes for 1/2" OD Cable	1 Boot Assembly
EB.5.5.12	5" Cushion 5 Holes for 1/2" OD Cable	1 Boot Assembly
EB.5.9.12	5" Cushion 9 Holes for 1/2" OD Cable	1 Boot Assembly
EB.5.1.58	5" Cushion 1 Hole for 5/8" OD Cable	1 Boot Assembly
EB.5.2.58	5" Cushion 2 Hole for 5/8" OD Cable	1 Boot Assembly
EB.5.3.58	5" Cushion 3 Hole for 5/8" OD Cable	1 Boot Assembly
EB.5.1.78	5" Cushion 1 Hole for 7/8" OD Cable	1 Boot Assembly
EB.5.2.78	5" Cushion 2 Holes for 7/8" OD Cable	1 Boot Assembly
EB.5.3.78	5" Cushion 3 Holes for 7/8" OD Cable	1 Boot Assembly
EB.5.4.78	5" Cushion 4 Holes for 7/8" OD Cable	1 Boot Assembly
EB.5.1.114	5" Cushion 1 Hole for 1-1/4" OD Cable	1 Boot Assembly
EB.5.1.158	5" Cushion 1 Hole for 1-5/8" OD Cable	1 Boot Assembly
EB.5.1.214	5" Cushion 1 Hole for 2-1/4" OD Cable	1 Boot Assembly

NOTE: Cushion hole configurations see page 53

Entry Boot Cushions

Entry Boot Cushions can be combined with 4" or 5" boots to create boot assemblies or with round member adapters to create cushion hangers.

- For use with 4" and 5" Entry Boots
- Custom sizes available
- Manufactured from UV resistant EPDM rubber



Entry Boot Cushion		
PART #	DESCRIPTION	QTY
EB.Cushion	Blank Entry Boot Cushion	1 Cushion
EB.Cushion.1.38	1 Hole for 3/8" OD Cable	1 Cushion
EB.Cushion.3.38	3 Holes for 3/8" OD Cable	1 Cushion
EB.Cushion.4.38	4 Holes for 3/8" OD Cable	1 Cushion
EB.Cushion.5.38	5 Holes for 3/8" OD Cable	1 Cushion
EB.Cushion.9.38	9 Holes for 3/8" OD Cable	1 Cushion
EB.Cushion.1.12	1 Hole for 1/2" OD Cable	1 Cushion
EB.Cushion.2.12	2 Holes for 1/2" OD Cable	1 Cushion
EB.Cushion.3.12	3 Holes for 1/2" OD Cable	1 Cushion
EB.Cushion.4.12	4 Holes for 1/2" OD Cable	1 Cushion
EB.Cushion.5.12	5 Holes for 1/2" OD Cable	1 Cushion

Entry Boot Cushion		
PART #	DESCRIPTION	QTY
EB.Cushion.9.12	9 Holes for 1/2" OD Cable	1 Cushion
EB.Cushion.1.58	1 Hole for 5/8" OD Cable	1 Cushion
EB.Cushion.2.58	2 Hole for 5/8" OD Cable	1 Cushion
EB.Cushion.3.58	3 Hole for 5/8" OD Cable	1 Cushion
EB.Cushion.1.78	1 Hole for 7/8" OD Cable	1 Cushion
EB.Cushion.2.78	2 Holes for 7/8" OD Cable	1 Cushion
EB.Cushion.3.78	3 Holes for 7/8" OD Cable	1 Cushion
EB.Cushion.4.78	4 Holes for 7/8" OD Cable	1 Cushion
EB.Cushion.1.114	1 Hole for 1-1/4" OD Cable	1 Cushion
EB.Cushion.1.158	1 Hole for 1-5/8" OD Cable	1 Cushion
EB.Cushion.1.214	1 Hole for 2-1/4" OD Cable	1 Cushion

Elliptical Waveguide Cushions		
PART #	DESCRIPTION	QTY
EB.Cushion.EW.1.52/60	Elliptical Waveguide Cushion 1 Hole, EW52/E60	1 Cushion
EB.Cushion.EW.1.53/65	Elliptical Waveguide Cushion 1 Hole, EW63/E65	1 Cushion
EB.Cushion.EW.1.90/105	Elliptical Waveguide Cushion 1 Hole, EW90/E105	1 Cushion
EB.Cushion.EW.1.180/185	Elliptical Waveguide Cushion 1 Hole, EW180/E185	1 Cushion

Cushion Plugs

Cushion plugs seal unused holes in entry boot cushions.

- Manufactured from UV resistant EPDM rubber



Cushion Plugs		
PART #	DESCRIPTION	QTY
EB.CP.38	3/8" Cushion Plug	1 Pack of 5
EB.CP.12	1/2" Cushion Plug	1 Pack of 5
EB.CP.78	7/8" Cushion Plug	1 Pack of 5
EB.CP.114	1-1/4" Cushion Plug	1 Pack of 5
EB.CP.158	1-5/8" Cushion Plug	1 Pack of 5

Entry Panel Caps



Entry Panel Caps		
PART #	DESCRIPTION	QTY
HW.EPC.4	4" Entry Port Cover	1 Cap
HW.EPC.5	5" Entry Port Cover	1 Cap

Entry Panels

4" Entry Panels create an excellent seal against moisture while providing a support point for cable entering radio cabinets or shelters.

- Entry caps included
- Mounting hardware included
- Provides effective seal against the ingress of dust and moisture when used with EB400 series boot assemblies



Entry Panels 4" Port				
PART #	DESCRIPTION	WALL OPENING	OVERALL SIZE	QTY
HW.EPP.4.1x1	4" 1 port, 1 x 1	4" x 4"	7" x 7"	1 Panel
HW.EPP.4.1x2	4" 2 port, 1 x 2	4" x 10"	9.5" x 15.5"	1 Panel
HW.EPP.4.1x3	4" 3 port, 1 x 3	4" x 15"	9.5" x 20"	1 Panel
HW.EPP.4.1x4	4" 4 port, 1 x 4	4" x 20.5"	9.5" x 25.5"	1 Panel
HW.EPP.4.1x6	4" 6 port, 1 x 6	4" x 30.5"	9.5" x 36.5"	1 Panel
HW.EPP.4.2x2	4" 4 port, 2 x 2	9.5" x 11"	17.5" x 17.5"	1 Panel
HW.EPP.4.2x3	4" 6 port, 2 x 3	9.5" x 15"	17.5" x 23"	1 Panel
HW.EPP.4.2x4	4" 8 port, 2 x 4	9.5" x 20.5"	17.5" x 25.5"	1 Panel
HW.EPP.4.2x5	4" 10 port, 2 x 5	9.5" x 24.5"	17.5" x 31"	1 Panel
HW.EPP.4.2x6	4" 12 port, 2 x 6	9.5" x 31.5"	17.5" x 39.5"	1 Panel
HW.EPP.4.3x3	4" 9 port, 3 x 3	15" x 15"	23" x 23"	1 Panel
HW.EPP.4.3x4	4" 12 port, 3 x 4	15" x 20.5"	25.5" x 25.5"	1 Panel
HW.EPP.4.3x6	4" 18 port, 3 x 6	15" x 31.5"	25.5" x 39.5"	1 Panel
HW.EPP.4.4x4	4" 16 port, 4 x 4	20.5" x 20.5"	25.5" x 25.5"	1 Panel
HW.EPP.4.4x6	4" 24 port, 4 x 6	20.5" x 31.5"	31" x 39.5"	1 Panel

Entry Panels

5" Entry Panels create an excellent seal against moisture while providing a support point for cable entering radio cabinets or shelters.

- Entry caps included
- Mounting hardware included
- Provides effective seal against the ingress of dust and moisture when used with EB500 series boot assemblies

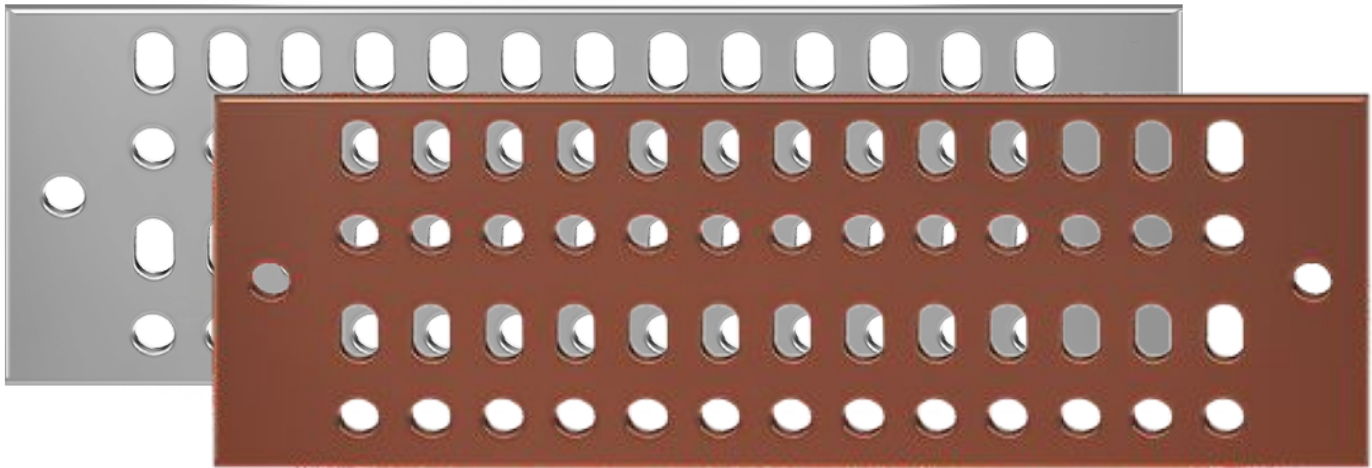


Entry Panels 5" Port

PART #	DESCRIPTION	WALL OPENING	OVERALL SIZE	QTY
HW.EPP.5.1x1	5" 1 port, 1 x 1	5" x 5"	9.5" x 9.5"	1 Panel
HW.EPP.5.1x2	5" 2 port, 1 x 2	5" x 12"	9.5" x 17.5"	1 Panel
HW.EPP.5.1x3	5" 3 port, 1 x 3	5" x 19"	9.5" x 25.5"	1 Panel
HW.EPP.5.2x2	5" 4 port, 2 x 2	12" x 12"	17.5" x 17.5"	1 Panel
HW.EPP.5.2x3	5" 6 port, 2 x 3	12" x 26"	17.5" x 25.5"	1 Panel



Universal Buss Bars



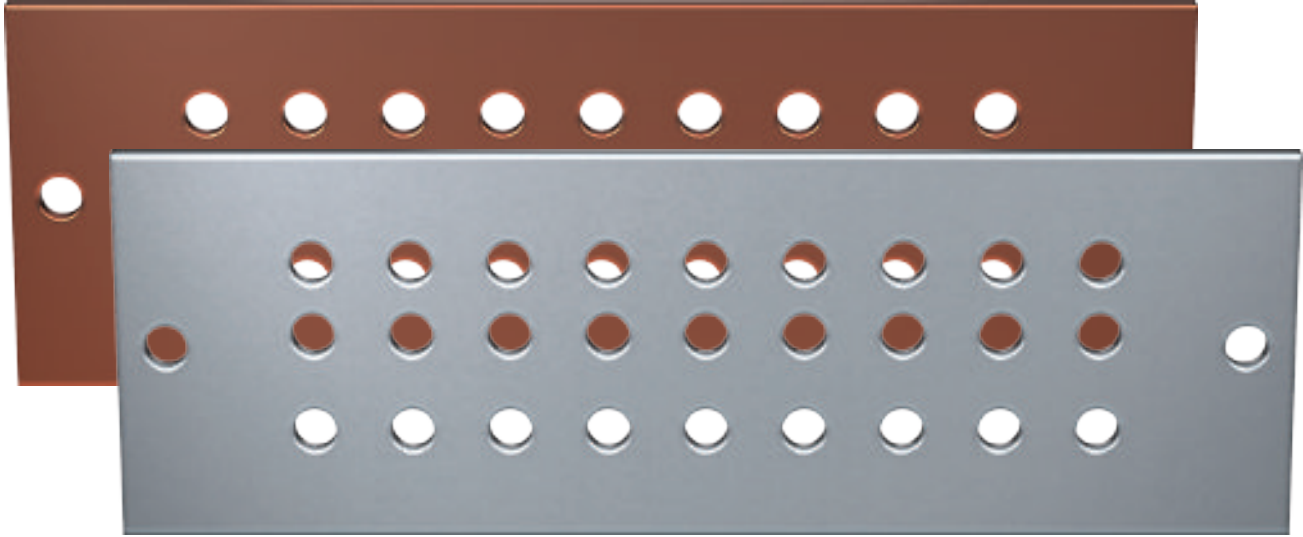
Universal Buss Bars are manufactured with a universal hole pattern in 2" and 4" widths. Our universal design accommodates lugs with 1" or 3/4" hole spacing.

- Manufactured from 1/4" thick copper bar
- Available in bare and tinned copper
- Custom sizes and hole configurations available
- Suited for 3/8" or 10 mm mounting hardware

Universal Buss Bars		
PART #	DESCRIPTION	QTY
HW.BBU.2x6	2" X 6", Universal Hole Pattern *	1 Bar
HW.BBUT.2x6	2" X 6", Tinned, Universal Hole Pattern *	1 Bar
HW.BBU.2x10	2" X 10", Universal Hole Pattern *	1 Bar
HW.BBUT.2x10	2" X 10", Tinned, Universal Hole Pattern *	1 Bar
HW.BBU.2x12	2" X 12", Universal Hole Pattern *	1 Bar
HW.BBUT.2x12	2" X 12", Tinned, Universal Hole Pattern *	1 Bar
HW.BBU.2x14	2" X 14", Universal Hole Pattern *	1 Bar
HW.BBUT.2x14	2" X 14", Tinned, Universal Hole Pattern *	1 Bar
HW.BBU.4x12	4" X 12", Universal Hole Pattern *	1 Bar
HW.BBUT.4x12	4" X 12", Tinned, Universal Hole Pattern *	1 Bar
HW.BBU.4x18	4" X 18", Universal Hole Pattern *	1 Bar
HW.BBUT.4x18	4" X 18", Tinned, Universal Hole Pattern *	1 Bar
HW.BBU.4x20	4" X 20", Universal Hole Pattern *	1 Bar
HW.BBUT.4x20	4" X 20", Tinned, Universal Hole Pattern *	1 Bar
HW.BBU.4x24	4" X 24", Universal Hole Pattern *	1 Bar
HW.BBUT.4x24	4" X 24", Tinned, Universal Hole Pattern *	1 Bar
HW.BBUG.4x12	4"X12", Galvanized, Universal Hole Pattern *	1 Bar
HW.BBUG.4x20	4"X20" Galvanized, Universal Hole Pattern *	1 Bar
HW.BBUG.4x24	4" X 24" Galvanized, Universal Hole *	1 Bar

* Hardware available upon request see page 26

Standard Buss Bars

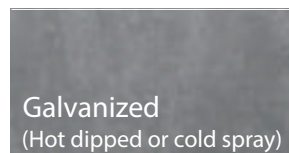
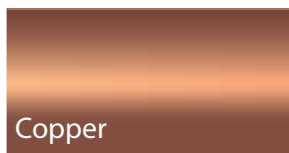


Standard Buss Bars are designed to accommodate 3/4" & 1" lug hole spacing. Custom sizes and hole patterns are available upon request.

- **Manufactured from 1/4" thick copper bar**
- **Available in bare and tinned copper**
- **Custom sizes and hole configurations available**

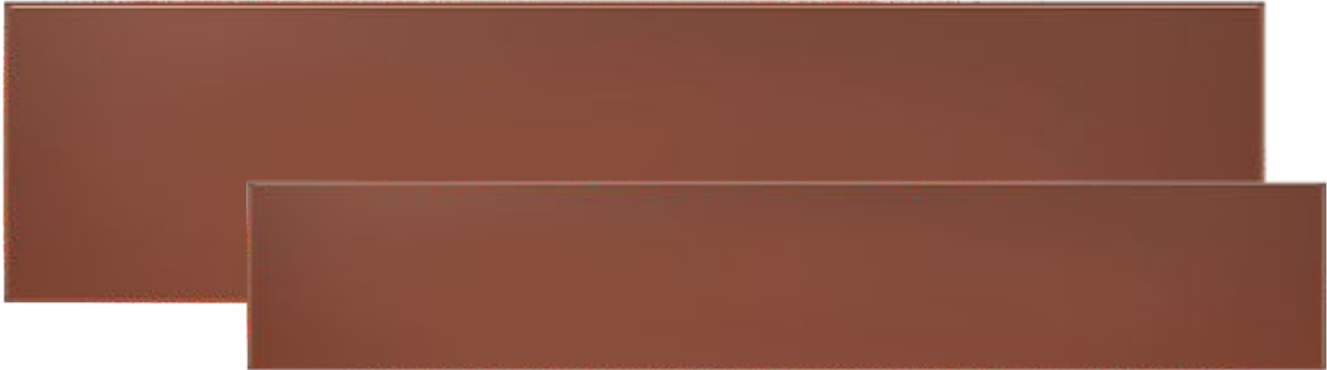
Standard Buss Bars		
PART #	DESCRIPTION	QTY
HW.BB.4x6	Standard Buss Bar, 4" x 6" *	1 Bar
HW.BBT.4x6	Standard Buss Bar, Tinned, 4" x 6" *	1 Bar
HW.BB.4x10	Standard Buss Bar, 4" x 10" *	1 Bar
HW.BBT.4x10	Standard Buss Bar, Tinned, 4" x 10" *	1 Bar
HW.BB.4x12	Standard Buss Bar, 4" x 12" *	1 Bar
HW.BBT.4x12	Standard Buss Bar, Tinned, 4" x 12" *	1 Bar
HW.BB.4x14	Standard Buss Bar, 4" x 14" *	1 Bar
HW.BBT.4x14	Standard Buss Bar, Tinned, 4" x 14" *	1 Bar
HW.BB.4x20	Standard Buss Bar, 4" x 20" *	1 Bar
HW.BBT.4x20	Standard Buss Bar, Tinned, 4" x 20" *	1 Bar
HW.BB.4x24	Standard Buss Bar, 4" x 24" *	1 Bar
HW.BBT.4x24	Standard Buss Bar, Tinned, 4" x 24" *	1 Bar

* Hardware available upon request see page 26



Other finishes available for all buss bars upon request

Blank Buss Bars

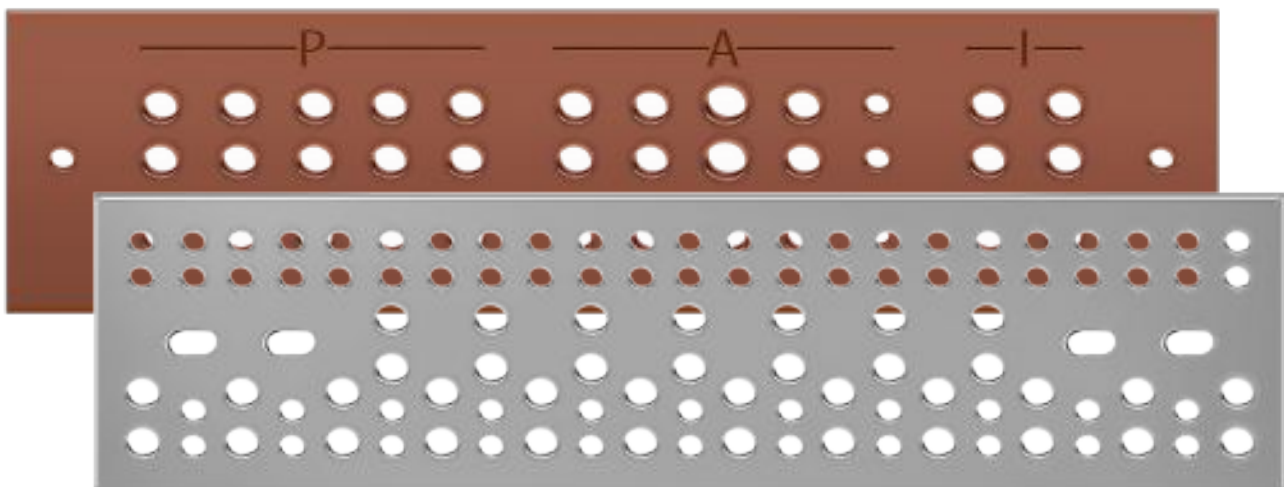


Blank Buss Bars allow for your own custom hole configuration

- Available in 2", 4" & 6" widths
- Any length up to 144"

Blank Buss Bars		
PART #	DESCRIPTION	QTY
HW.BB.Blank.2x10	2" x 10" Blank Buss Bar	1 Bar
HW.BB.Blank.2x12	2" x 12" Blank Buss Bar	1 Bar
HW.BB.Blank.2x36	2" x 36" Blank Buss Bar	1 Bar
HW.BB.Blank.4x12	4" x 12" Blank Buss Bar	1 Bar
HW.BB.Blank.4x36	4" x 36" Blank Buss Bar	1 Bar

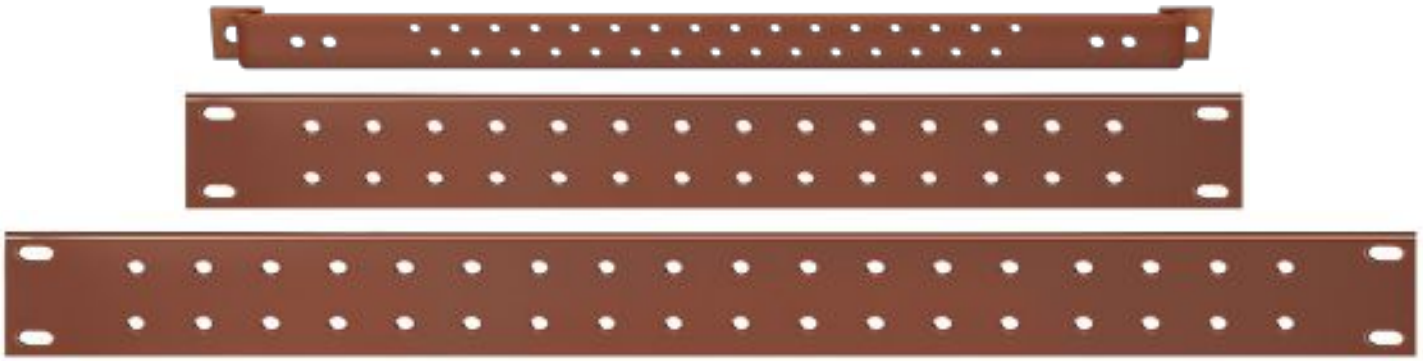
Custom Buss Bars



Custom Buss Bars can be created to suit any custom project. Our capabilities allow for any hole configuration, spacing and size. We maintain a variety of raw material which allows us to expedite delivery of custom buss bars.

- Carrier specific stamping and product specific instructions available
- 2", 4" & 6" bars
- Letter stamping
- Custom mounting
- Custom lengths
- 1/8" to 1/4" thickness
- Protective cover kits
- Tapped mounting holes
- (- & +) Distribution Bars

Equipment Rack Buss Bars



Equipment Rack Buss Bars		
PART #	DESCRIPTION	QTY
HW.BBER141190S	1/4" x 1" x 19" Equipment Rack Buss Bar (1" Off-set)*	1 Bar
HW.BBER14219	1/4" x 2" x 19" Equipment Rack Buss Bar*	1 Bar
HW.BBER14223	1/4" x 2" x 23" Equipment Rack Buss Bar*	1 Bar

Equipment Rack Buss Bar Mounting Hardware



HW.BBISO



HW.BBIS



HW.SPH10321



HW.SHH122412



HW.SHH122434

Equipment Rack Hardware		
PART #	DESCRIPTION	QTY
HW.BBISO	Buss Bar Insulator Stand Off (Requires SHH122412 & SHH122434)	1
HW.BBIS	Phenolic Buss Bar Insulator Strip	1
HW.SPH10321	10-32 x 1" Pan Head Machine Screw	1
HW.SHH122412	12-24 x 1/2" Slot Hex Washer Head Taptite Thread Roll Screw	1
HW.SSH122434	12-24 x 3/4" Slot Hex Washer Head Taptite Thread Roll Screw	1

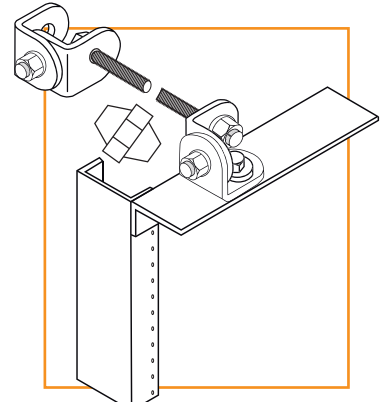
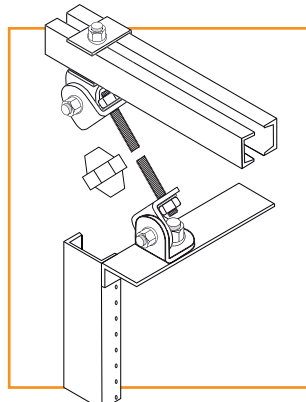
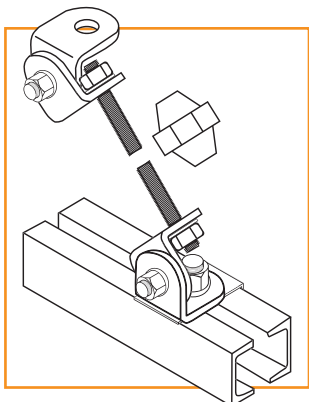
Universal Equipment Rack Stabilizer

- Yellow zinc finish
- Components available individually
- Universal design



Universal Equipment Rack Stabilizer Hardware		
PART #	DESCRIPTION	QTY
HW.AYZ	Yellow Zinc Angle (Elephant Ear)	4
HW.BUYZ	Yellow Zinc U Bracket	1
HW.TRYZ5812	Yellow Zinc 5/8" X 12" Threaded Rod	1
HW.TRYZ5824	Yellow Zinc 5/8" X 24" Threaded Rod	1
HW.BYZ121716	Yellow Zinc 1/2" X 1-7/16" Bolt	3
HW.NYZ12	Yellow Zinc 1/2" Nut	3
HW.WLYZ12	Yellow Zinc 1/2" Split Lock Washer	3
HW.WFYZ12	Yellow Zinc 1/2" Flat Washer	2
HW.BYZ582	Yellow Zinc 5/8" X 2" Bolt	1
HW.NYZ58	Yellow Zinc 5/8" Nut	5
HW.NLYZ58	Yellow Zinc 5/8" Split Lock Washer	5
HW.BBIB58	5/8" Tapped Insulator	1

Universal Equipment Rack Stabilizer Kit		
PART #	DESCRIPTION	QTY
HW.SEISMI.Kit	Universal Equipment Rack Stabilizer Kit (Includes all hardware listed above)	1 Kit



Buss Bar Mounting Hardware



BBI14



BBI38



BBI381S



BBI14K



BBI38K



BBHKU



BBHKS



BBHKR



BBHKT

Buss Bar Hardware kits allow all sizes of buss bars to be secured in virtually any application.

- Stainless steel attachment hardware
- Glass reinforced polyester insulators
- Galvanized shelter brackets

Buss Bar Mounting Hardware		
PART #	DESCRIPTION	QTY
HW.BBMH.14	1/4" Buss Bar Insulator	1 Insulator
HW.BBMH.14.Kit	1/4" Buss Bar Insulator Kit (two 1/4" insulators, four 1/4" bolts, four 1/4" lock washers)	1 Kit
HW.BBMH.38	3/8" Buss Bar Insulator	1 Insulator
HW.BBMH.38.Kit	3/8" Buss Bar Insulator Kit (two 3/8" insulators, four 3/8" bolts, four 3/8" lock washers)	1 Kit
HW.BBMH.38.16x1	3/8"-16 x 1" Stud (for stacking buss bars or mounting buss bar cover)	1 Stud
HW.BBMH.Universal.Kit	Universal Attachment Hardware Kit	1 Kit
HW.BBMH.Shelter.Kit	Shelter (wall) Attachment Hardware Kit	1 Kit
HW.BBMH.RoundM.Kit	Round Member Attachment Hardware Kit	1 Kit
HW.BBMH.Tower.Kit	Tower (angle) Attachment Hardware Kit	1 Kit

Standard Ground Kit

The Standard Ground Kit utilizes a mechanically attached ground strap. The ground strap incorporates an expansion rib which eliminates any concern of over tightening.

- Large contact surface area
- Expansion rib prevents over tightening
- 5 ft, 6 AWG ground lead
- Custom sizes available upon request



Standard Ground Kits		
PART #	DESCRIPTION	QTY
HW.GRND.KIT.38	Standard Ground Kit for 3/8" Coaxial Cable	1 Kit
HW.GRND.KIT.T.38	Standard Ground Kit for 3/8" Coaxial Cable (Tinned)	1 Kit
HW.GRND.KIT.12	Standard Ground Kit for 1/2" Coaxial Cable	1 Kit
HW.GRND.KIT.T.12	Standard Ground Kit for 1/2" Coaxial Cable (Tinned)	1 Kit
HW.GRND.KIT.58	Standard Ground Kit for 5/8" Coaxial Cable	1 Kit
HW.GRND.KIT.T.58	Standard Ground Kit for 5/8" Coaxial Cable (Tinned)	1 Kit
HW.GRND.KIT.78	Standard Ground Kit for 7/8" Coaxial Cable	1 Kit
HW.GRND.KIT.T.78	Standard Ground Kit for 7/8" Coaxial Cable (Tinned)	1 Kit
HW.GRND.KIT.114	Standard Ground Kit for 1-1/4" Coaxial Cable	1 Kit
HW.GRND.KIT.T.114	Standard Ground Kit for 1-1/4" Coaxial Cable (Tinned)	1 Kit
HW.GRND.KIT.158	Standard Ground Kit for 1-5/8" Coaxial Cable	1 Kit
HW.GRND.KIT.T.158	Standard Ground Kit for 1-5/8" Coaxial Cable (Tinned)	1 Kit
HW.GRND.KIT.214	Standard Ground Kit for 2-1/4" Coaxial Cable	1 Kit
HW.GRND.KIT.T.214	Standard Ground Kit for 2-1/4" Coaxial Cable (Tinned)	1 Kit

Universal Ground Kit

Universal Ground Kits are designed to be compatible with corrugated coax, elliptical waveguide, hybrid, fiber and power assemblies.

- Available with bare or tinned copper ground strap
- 5 ft, 6 AWG ground lead
- Expansion rib prevents over tightening
- Includes 1/4" and 3/8" Universal Ground Lug



Universal Ground Kits		
PART #	DESCRIPTION	QTY
HW.GRNDU.KIT.5	Universal Ground Kit with 5' Lead	1 Kit
HW.GRNDU.KIT.5T	Universal Ground Kit with 5' Lead (Tinned)	1 Kit

Snap-On Ground Kit

The Snap-On Ground Kit is designed to be quickly snapped onto the cable and locked into place with the stainless steel clip.

- Unique design reduces installation time
- Large contact area
- 5 ft, 6 AWG ground lead



Snap-On Ground Kits		
PART #	DESCRIPTION	QTY
HW.GRNSO.KIT.12	Snap-On Ground Kit for 1/2" Coaxial Cable	1 Kit
HW.GRNSO.KIT.T.12	Snap-On Ground Kit for 1/2" Coaxial Cable (Tinned)	1 Kit
HW.GRNSO.KIT.78	Snap-On Ground Kit for 7/8" Coaxial Cable	1 Kit
HW.GRNSO.KIT.T.78	Snap-On Ground Kit for 7/8" Coaxial Cable (Tinned)	1 Kit
HW.GRNSO.KIT.114	Snap-On Ground Kit for 1-1/4" Coaxial Cable	1 Kit
HW.GRNSO.KIT.T.114	Snap-On Ground Kit for 1-1/4" Coaxial Cable (Tinned)	1 Kit
HW.GRNSO.KIT.158	Snap-On Ground Kit for 1-5/8" Coaxial Cable	1 Kit
HW.GRNSO.KIT.T.158	Snap-On Ground Kit for 1-5/8" Coaxial Cable (Tinned)	1 Kit

Mini-Universal Ground Kit

Mini-Universal Ground Kits are designed to be compatible with corrugated coax, elliptical waveguide, hybrid, fiber and power assemblies.

- Available with bare or tinned copper ground strap
- 2ft & 5 ft, 6 AWG ground lead
- Includes 3/8" universal ground lug
- Grounding for 1/4"-3/8" (6mm-10mm) cable



Mini-Universal Ground Kits		
PART #	DESCRIPTION	QTY
HW.GRNDM.KIT.2	Mini-Universal Ground Kit with 2' Lead	1 Kit
HW.GRNDM.KIT.T.2	Mini-Universal Ground Kit with 2' Lead (Tinned)	1 Kit
HW.GRNDM.KIT.5	Mini-Universal Ground Kit with 5' Lead	1 Kit
HW.GRNDM.KIT.T.5	Mini-Universal Ground Kit with 5' Lead (Tinned)	1 Kit

Heat Shrink 4' Sticks

- UL approved
- Non Adhesive, 2:1 shrink ratio
- Adhesive, 3:1 shrink ratio
- Available in a variety of colors



Black Heat Shrink Sticks		
PART #	DESCRIPTION	QTY
HS.ABLK.1848	Heat Shrink, Black, Adhesive, 1/8"x48", 3:1	1, 48" Stick
HS.BLK.1848	Heat Shrink, Black, Non Adhesive, 1/8"x48", 3:1	1, 48" Stick
HS.ABLK.1448	Heat Shrink, Black, Adhesive, 1/4"x48", 3:1	1, 48" Stick
HS.BLK.1448	Heat Shrink, Black, Non Adhesive, 1/4"x48", 2:1	1, 48" Stick
HS.ABLK.3848	Heat Shrink, Black, Adhesive, 3/8"x48", 3:1	1, 48" Stick
HS.BLK.3848	Heat Shrink, Black, Non Adhesive, 3/8"x48", 2:1	1, 48" Stick
HS.ABLK.1248	Heat Shrink, Black, Adhesive, 1/2"x48", 3:1	1, 48" Stick
HS.BLK.1248	Heat Shrink, Black, Non Adhesive, 1/2"x48", 2:1	1, 48" Stick
HS.ABLK.3448	Heat Shrink, Black, Adhesive, 3/4"x48", 3:1	1, 48" Stick
HS.BLK.3448	Heat Shrink, Black, Non Adhesive, 3/4"x48", 2:1	1, 48" Stick
HS.ABLK.148	Heat Shrink, Black, Adhesive, 1"x48", 3:1	1, 48" Stick
HS.BLK.148	Heat Shrink, Black, Non Adhesive, 1"x48", 3:1	1, 48" Stick
HS.ABLK.11248	Heat Shrink, Black, Adhesive, 1-1/2"x48", 3:1	1, 48" Stick
HS.BLK.11248	Heat Shrink, Black, Non Adhesive, 1-1/2"x48", 2:1	1, 48" Stick
HS.BLK.248	Heat Shrink, Black, Non Adhesive, 2"x48", 2:1	1, 48" Stick

Clear Heat Shrink Sticks		
PART #	DESCRIPTION	QTY
HS.ACL.1848	Heat Shrink, Clear, Adhesive, 1/8" x 48", 3:1 Shrink Ratio	1, 48" Stick
HS.1635F1/8-C48	Heat Shrink, Clear, Non Adhesive, 1/8" x 48", 2:1 Shrink Ratio	1, 48" Stick
HS.ACL.1448	Heat Shrink, Clear, Adhesive, 1/4" x 48", 3:1 Shrink Ratio	1, 48" Stick
HS.1635F1/4-C48	Heat Shrink, Clear, Non Adhesive, 1/4" x 48", 2:1 Shrink Ratio	1, 48" Stick
HS.ACL.3848	Heat Shrink, Clear, Adhesive, 3/8" x 48", 3:1 Shrink Ratio	1, 48" Stick
HS.1635F3/8-C48	Heat Shrink, Clear, Non Adhesive, 3/8" x 48", 2:1 Shrink Ratio	1, 48" Stick
HS.ACL.1248	Heat Shrink, Clear, Adhesive, 1/2" x 48", 3:1 Shrink Ratio	1, 48" Stick
HS.1635F1/2-C48	Heat Shrink, Clear, Non Adhesive, 1/2" x 48", 2:1 Shrink Ratio	1, 48" Stick
HS.ACL.3448	Heat Shrink, Clear, Adhesive, 3/4" x 48", 3:1 Shrink Ratio	1, 48" Stick
HS.1635F3/4-C48	Heat Shrink, Clear, Non Adhesive, 3/4" x 48", 2:1 Shrink Ratio	1, 48" Stick
HS.ACL.148	Heat Shrink, Clear, Adhesive, 1" x 48", 3:1 Shrink Ratio	1, 48" Stick
HS.1635F1-C48	Heat Shrink, Clear, Non Adhesive 1" x 48", 2:1 Shrink Ratio	1, 48" Stick
HS.ACL.11248	Heat Shrink, Clear, Adhesive, 1-1/2" x 48", 3:1 Shrink Ratio	1, 48" Stick
HS.1635F11/2-C48	Heat Shrink, Clear, Non Adhesive 1-1/2" x 48", 2:1 Shrink Ratio	1, 48" Stick
HS.CL248	Heat Shrink, Clear, Non Adhesive, 2" x 48", 2:1 Shrink Ratio	1, 48" Stick

Black Heat Shrink Rolls

- UL approved
- Non Adhesive, 2:1 shrink ratio
- Adhesive, 3:1 shrink ratio
- Available in a variety of colors



Black Heat Shrink Rolls		
PART #	DESCRIPTION	QTY
HS.BLK.14-100F	Heat Shrink, Black, Non Adhesive, 1/4" x 100', 2:1 Shrink Ratio	1, 100' Roll
HS.ABLK.38-100F	Heat Shrink, Black, Adhesive, 3/8" x 100', 3:1 Shrink Ratio	1, 100' Roll
HS.BLK.38-100F	Heat Shrink, Black, Non Adhesive, 3/8" x 100', 2:1 Shrink Ratio	1, 100' Roll
HS.ABLK.12-100F	Heat Shrink, Black, Adhesive, 1/2" x 100', 3:1 Shrink Ratio	1, 100' Roll
HS.BLK.12-100F	Heat Shrink, Black, Non Adhesive, 1/2" x 100', 2:1 Shrink Ratio	1, 100' Roll
HS.BLK.34-100F	Heat Shrink, Black, Non Adhesive, 3/4" x 100', 2:1 Shrink Ratio	1, 100' Roll

Clear Heat Shrink Rolls

- UL approved
- Non Adhesive, 2:1 shrink ratio
- Adhesive, 3:1 shrink ratio
- Available in a variety of colors

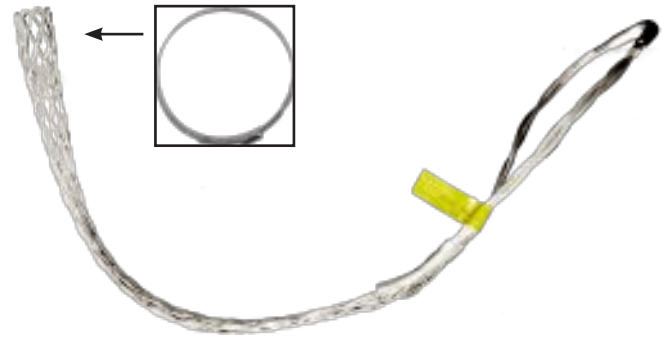


Clear Heat Shrink Rolls		
PART #	DESCRIPTION	QTY
HS.ACL.38-100F	Heat Shrink, Clear, Adhesive, 3/8" x 100', 3:1 Shrink Ratio	1, 100' Roll
HS.CL.38-100F	Heat Shrink, Clear, Non Adhesive, 3/8" x 100', 2:1 Shrink Ratio	1, 100' Roll
HS.CL.14-100F	Heat Shrink, Clear, Non Adhesive, 1/4" x 100', 2:1 Shrink Ratio	1, 100' Roll
HS.ACL.12-100F	Heat Shrink, Clear, Adhesive, 1/2" x 100', 3:1 Shrink Ratio	1, 100' Roll
HS.CL.12-100F	Heat Shrink, Clear, Non Adhesive, 1/2" x 100', 2:1 Shrink Ratio	1, 100' Roll
HS.CL.34-100F	Heat Shrink, Clear, Non Adhesive, 3/4" x 100', 2:1 Shrink Ratio	1, 100' Roll
HS.CL.1-100F	Heat Shrink, Clear, Non Adhesive, 1" x 100', 2:1 Shrink Ratio	1, 100' Roll

Other colors available. Some colors, sizes and adhesives are not stock items please call to confirm lead time.



Hoisting Grips



Hoisting Grips are designed to lift and support all types of coaxial cable. Hoisting Grips are available in both Closed Weave (Pre-laced) and Open Weave (Lace-up) design.

- Available in open weave and closed weave design
- Support clamp included with closed weave grips
- Custom sizes hoisting grips available upon request

Open Weave Hoisting Grips		
PART #	DESCRIPTION	QTY
HG.OW.14	Open Weave Grip for 1/4" Cable	1 Grip
HG.OW.38	Open Weave Grip for 3/8" Cable	1 Grip
HG.OW.12	Open Weave Grip for 1/2" Cable	1 Grip
HG.OW.58	Open Weave Grip for 5/8" Cable	1 Grip
HG.OW.78	Open Weave Grip for 7/8" Cable	1 Grip
HG.OW.114	Open Weave Grip for 1-1/4" Cable	1 Grip
HG.OW.158	Open Weave Grip for 1-5/8" Cable	1 Grip
HG.OW.214	Open Weave Grip for 2-1/4" Cable	1 Grip

Closed Weave Hoisting Grips		
PART #	DESCRIPTION	QTY
HG.CW.14	Closed Weave Grip for 1/4" Cable	1 Grip
HG.CW.38	Closed Weave Grip for 3/8" Cable	1 Grip
HG.CW.12	Closed Weave Grip for 1/2" Cable	1 Grip
HG.CW.58	Closed Weave Grip for 5/8" Cable	1 Grip
HG.CW.78	Closed Weave Grip for 7/8" Cable	1 Grip
HG.CW.114	Closed Weave Grip for 1-1/4" Cable	1 Grip
HG.CW.158	Closed Weave Grip for 1-5/8" Cable	1 Grip
HG.CW.214	Closed Weave Grip for 2-1/4" Cable	1 Grip



Fiber Hoisting Grips

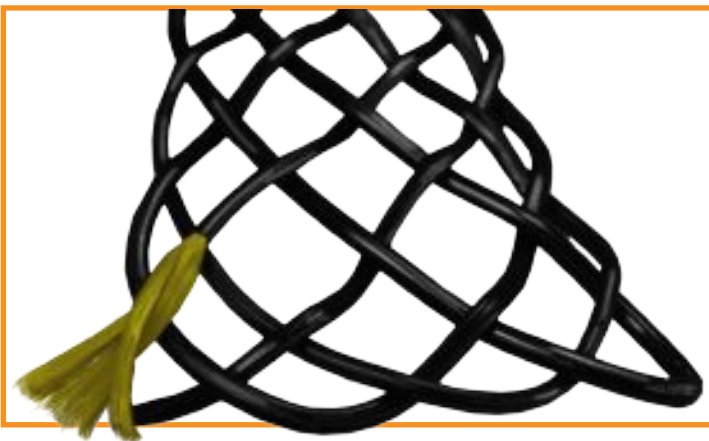


Fiber Hoisting Grips are manufactured from coated aramid fiber to reduce PIM interference. Hoisting Grips are available in both Closed Weave (Pre-laced) and Open Weave (Lace-up) design.

- Made from aramid fiber and UV coating
- Available in open weave and closed weave design
- Custom sizes hoisting grips available upon request

Open Weave Fiber Hoisting Grips		
PART #	DESCRIPTION	QTY
HG.OWF.14	Open Weave Fiber Grip for 1/4" Cable	1 Grip
HG.OWF.38	Open Weave Fiber Grip for 3/8" Cable	1 Grip
HG.OWF.12	Open Weave Fiber Grip for 1/2" Cable	1 Grip
HG.OWF.58	Open Weave Fiber Grip for 5/8" Cable	1 Grip
HG.OWF.78	Open Weave Fiber Grip for 7/8" Cable	1 Grip
HG.OWF.114	Open Weave Fiber Grip for 1-1/4" Cable	1 Grip
HG.OWF.158	Open Weave Fiber Grip for 1-5/8" Cable	1 Grip
HG.OWF.214	Open Weave Fiber Grip for 2-1/4" Cable	1 Grip

Closed Weave Fiber Hoisting Grips		
PART #	DESCRIPTION	QTY
HG.CWF.14	Closed Weave Fiber Grip for 1/4" Cable	1 Grip
HG.CWF.38	Closed Weave Fiber Grip for 3/8" Cable	1 Grip
HG.CWF.12	Closed Weave Fiber Grip for 1/2" Cable	1 Grip
HG.CWF.58	Closed Weave Fiber Grip for 5/8" Cable	1 Grip
HG.CWF.78	Closed Weave Fiber Grip for 7/8" Cable	1 Grip
HG.CWF.114	Closed Weave Fiber Grip for 1-1/4" Cable	1 Grip
HG.CWF.158	Closed Weave Fiber Grip for 1-5/8" Cable	1 Grip
HG.CWF.214	Closed Weave Fiber Grip for 2-1/4" Cable	1 Grip



7/16 Termination Loads

Operating frequency band, 0-3GHZ. Cooling fins minimize temperature rise.

- High reliability
- Low VSWR
- Other loads available



7/16 DIN Connector Termination Loads

PART #	DESCRIPTION	QTY
TL.2Watt.7/16.Male	Termination Load, 2 Watt, 7/16 DIN Male	1 Term Load
TL.2Watt.7/16.Female	Termination Load, 2 Watt, 7/16 DIN Female	1 Term Load
TL.5Watt.7/16.Male	Termination Load, 5 Watt, 7/16 DIN Male	1 Term Load
TL.5Watt.7/16.Female	Termination Load, 5 Watt, 7/16 DIN Female	1 Term Load
TL.10Watt.7/16.Male	Termination Load, 10 Watt, 7/16 DIN Male	1 Term Load
TL.10Watt.7/16.Female	Termination Load, 10 Watt, 7/16 DIN Female	1 Term Load
TL.25Watt.7/16.Male	Termination Load, 25 Watt, 7/16 DIN Male	1 Term Load
TL.25Watt.7/16.Female	Termination Load, 25 Watt, 7/16 DIN Female	1 Term Load
TL.50Watt.7/16.Male	Termination Load, 50 Watt, 7/16 DIN Male	1 Term Load
TL.50Watt.7/16.Female	Termination Load, 50 Watt, 7/16 DIN Female	1 Term Load
TL.100Watt.7/16.Male	Termination Load, 100 Watt, 7/16 DIN Male	1 Term Load
TL.100Watt.7/16.Female	Termination Load, 100 Watt, 7/16 DIN Female	1 Term Load

4.3-10 Termination Loads

Operating frequency band, 0-3GHZ. Cooling fins minimize temperature rise.

- High reliability
- Low VSWR
- Other loads available



4.3/10 Mini DIN Connector Termination Loads

PART #	DESCRIPTION	QTY
TL.2Watt.4.3/10.Male	Termination Load, 2 Watt, 4.3/10 Mini DIN Male	1 Term Load
TL.2Watt.4.3/10.Female	Termination Load, 2 Watt, 4.3/10 Mini DIN Female	1 Term Load
TL.5Watt.4.3/10.Male	Termination Load, 5 Watt, 4.3/10 Mini DIN Male	1 Term Load
TL.5Watt.4.3/10.Female	Termination Load, 5 Watt, 4.3/10 Mini DIN Female	1 Term Load
TL.10Watt.4.3/10.Male	Termination Load, 10 Watt, 4.3/10 Mini DIN Male	1 Term Load
TL.10Watt.4.3/10.Female	Termination Load, 10 Watt, 4.3/10 Mini DIN Female	1 Term Load
TL.25Watt.4.3/10.Male	Termination Load, 25 Watt, 4.3/10 Mini DIN Male	1 Term Load
TL.25Watt.4.3/10.Female	Termination Load, 25 Watt, 4.3/10 Mini DIN Female	1 Term Load
TL.50Watt.4.3/10.Male	Termination Load, 50 Watt, 4.3/10 Mini DIN Male	1 Term Load
TL.50Watt.4.3/10.Female	Termination Load, 50 Watt, 4.3/10 Mini DIN Female	1 Term Load
TL.100Watt.4.3/10.Male	Termination Load, 100 Watt, 4.3/10 Mini DIN Male	1 Term Load
TL.100Watt.4.3/10.Female	Termination Load, 100 Watt, 4.3/10 Mini DIN Female	1 Term Load

End Caps



End Cap		
PART #	DESCRIPTION	QTY
HW.EC.F.DIN.10	Micro DIN Female End Cap	1 Cap
HW.EC.F.DIN.4310	4.3-10 DIN Female End Cap	1 Cap
HW.EC.F.DIN.713	7-16 DIN Female End Cap	1 Cap

RET Cables

RET Cables feed data and power from the controller to the remote electrical tilt system.

- Feed data and power to RET system components
- Remote electrical tilt control cable, IP67 standard
- Connectors AISG output/input
- Custom lengths available



AISG RET Cable		
PART #	DESCRIPTION	QTY
RET.171.005	AISG RET 8 Pin cable male to female 0.5 Meter	1 Cable
RET.171.01	AISG RET 8 Pin cable male to female 1 Meter	1 Cable
RET.171.02	AISG RET 8 Pin cable male to female 2 Meters	1 Cable
RET.171.03	AISG RET 8 Pin cable male to female 3 Meters	1 Cable
RET.171.04	AISG RET 8 Pin cable male to female 4 Meters	1 Cable
RET.171.05	AISG RET 8 Pin cable male to female 5 Meters	1 Cable
RET.171.06	AISG RET 8 Pin cable male to female 6 Meters	1 Cable
RET.171.09	AISG RET 8 Pin cable male to female 9 Meters	1 Cable
RET.171.10	AISG RET 8 Pin cable male to female 10 Meters	1 Cable
RET.171.15	AISG RET 8 Pin cable male to female 15 Meters	1 Cable
RET.171.20	AISG RET 8 Pin cable male to female 20 Meters	1 Cable
RET.171.25	AISG RET 8 Pin cable male to female 25 Meters	1 Cable
RET.171.30	AISG RET 8 Pin cable male to female 30 Meters	1 Cable
RET.171.40	AISG RET 8 Pin cable male to female 40 Meters	1 Cable
RET.171.50	AISG RET 8 Pin cable male to female 50 Meters	1 Cable
RET.171.60	AISG RET 8 Pin cable male to female 60 Meters	1 Cable
RET.171.70	AISG RET 8 Pin cable male to female 70 Meters	1 Cable
RET.171.80	AISG RET 8 Pin cable male to female 80 Meters	1 Cable
RET.171.90	AISG RET 8 Pin cable male to female 90 Meters	1 Cable
RET.171.100	AISG RET 8 Pin cable male to female 100 Meters	1 Cable

PIM Mitigation Snap-in Single Blocks

Snap Blocks easily snap into 3/4" ID mounting holes providing a solid base which reduces lateral movement. Blocks are stackable and re-adjustable.

- **Manufactured from weather resistant polypropylene**
- **Insert manufactured from POM6**
- **Patent Pending**



PIM Mitigation Snap-in Single Blocks		
PART #	DESCRIPTION	QTY
PIM.SBS.5-8	PIM Mitigation Snap-in Single Block 5mm-8mm Cable	1 Pack of 10
PIM.SBS.8-12	PIM Mitigation Snap-in Single Block 8mm-12mm Cable	1 Pack of 10
PIM.SBS.12-16	PIM Mitigation Snap-in Single Block 12mm-16mm Cable (1/2" Flex and 1/2" Standard Coax)	1 Pack of 10

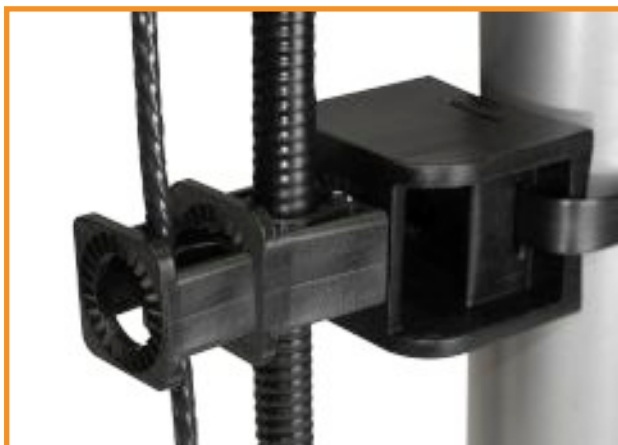
PIM Mitigation Snap-in Double Blocks



Snap Blocks easily snap into 3/4" ID mounting holes, providing cable support while eliminating a common source of PIM. PIM Blocks are stackable and re-adjustable.

- **Manufactured from weather resistant polypropylene**
- **Insert manufactured from POM**
- **Reduces installation time**
- **US Patent No. 7,484,698**

PIM Mitigation Snap-in Double Blocks		
PART #	DESCRIPTION	QTY
PIM.SBD.5-8	PIM Mitigation Snap-in Double Block 5mm-8mm Cable	1 Pack of 10
PIM.SBD.8-12	PIM Mitigation Snap-in Double Block 8mm-12mm Cable	1 Pack of 10
PIM.SBD.12-16	PIM Mitigation Snap-in Double Block 12mm-16mm Cable (1/2" Flex and 1/2" Standard Coax)	1 Pack of 10
PIM.DBS.78	PIM Mitigation Snap-in Double Block 7/8" Cable (Compatible with 7/8" inserts for variety of cable sizes)	1 Pack of 10



PIM Stand-Off Adapter

Stand-Off Adapters provide an attachment point for snap-in hangers and snap-in blocks. Eliminates a common source of PIM.

- Manufactured from weather resistant polypropylene
- 3/4" thru hole attachment point
- 3/8" threaded rod mounting capability
- Compatible with 1/2" banding



PIM Mitigation Stand-Off Adapter

PART #	DESCRIPTION	QTY
PIM.SO.34-38	PIM Mitigation Stand-off Adapter (3/4" thru hole or 3/8" attachment point)	1 Pack of 10

3 Way Stand-Off Adapter

3 Way Stand-Off Adapter provide three attachment points for snap-in hangers and snap-in blocks. Eliminates a common source of PIM.

- Manufactured from weather resistant polypropylene
- 3/4" thru hole attachment point
- 3/8" threaded rod mounting capability
- Compatible with 1/2" banding



PIM Mitigation 3 Way Stand-Off Adapter

PART #	DESCRIPTION	QTY
PIM.SO3.34	PIM Mitigation 3 Way Stand-off Adapter (3, 3/4" thru hole attachment points)	1 Pack of 10

3 Way Stand-Off Adapter 3/8" Mounting

3 Way Stand-Off Adapter provide three attachment points for snap-in hangers and snap-in blocks.

Eliminates a common source of PIM.

- Manufactured from weather resistant polypropylene
- 3/4" thru hole attachment point
- 3/8" threaded rod mounting capability
- Bolts with 3/8" mounting hardware



PIM Mitigation 3 Way Stand-Off Adapter 3/8" Mounting

PART #	DESCRIPTION	QTY
PIM.SO3.34.38	PIM Mitigation 3 Way Stand-off Adapter (3, 3/4" thru hole attachment points) 3/8" Mounting	1 Pack of 10

Fiber Hoisting Grips

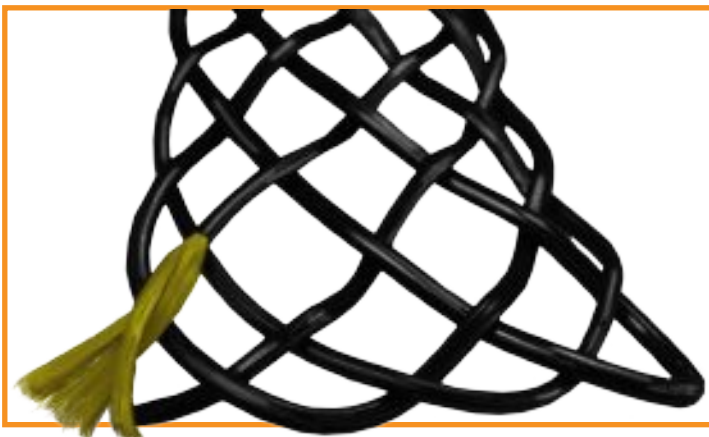


Fiber Hoisting Grips are manufactured from coated arimid fiber to reduce PIM interference. Hoisting Grips are available in both Closed Weave (Pre-laced) and Open Weave (Lace-up) design.

- Made from aramid fiber and UV coating
- Available in open weave and closed weave design
- Custom sizes hoisting grips available upon request

Open Weave Fiber Hoisting Grips		
PART #	DESCRIPTION	QTY
HG.OWF.14	Open Weave Fiber Grip for 1/4" Coax Cable	1 Grip
HG.OWF.38	Open Weave Fiber Grip for 3/8" Coax Cable	1 Grip
HG.OWF.12	Open Weave Fiber Grip for 1/2" Coax Cable	1 Grip
HG.OWF.58	Open Weave Fiber Grip for 5/8" Coax Cable	1 Grip
HG.OWF.78	Open Weave Fiber Grip for 7/8" Coax Cable	1 Grip
HG.OWF.114	Open Weave Fiber Grip for 1-1/4" Coax Cable	1 Grip
HG.OWF.158	Open Weave Fiber Grip for 1-5/8" Coax Cable	1 Grip
HG.OWF.214	Open Weave Fiber Grip for 2-1/4" Coax Cable	1 Grip

Closed Weave Fiber Hoisting Grips		
PART #	DESCRIPTION	QTY
HG.CWF.14	Closed Weave Fiber Grip for 1/4" Cable	1 Grip
HG.CWF.38	Closed Weave Fiber Grip for 3/8" Cable	1 Grip
HG.CWF.12	Closed Weave Fiber Grip for 1/2" Cable	1 Grip
HG.CWF.58	Closed Weave Fiber Grip for 5/8" Cable	1 Grip
HG.CWF.78	Closed Weave Fiber Grip for 7/8" Cable	1 Grip
HG.CWF.114	Closed Weave Fiber Grip for 1-1/4" Cable	1 Grip
HG.CWF.158	Closed Weave Fiber Grip for 1-5/8" Cable	1 Grip
HG.CWF.214	Closed Weave Fiber Grip for 2-1/4" Cable	1 Grip



Cable Ties



Cable Ties		
PART #	DESCRIPTION	KIT QTY
HW.TWB450	Black UV Rated 50 lbs. Cable Tie 4"	1 Pack of 50
HW.TWB850	Black UV Rated 50 lbs. Cable Tie 8"	1 Pack of 50
HW.TWB8100	Black UV Rated 50 lbs. Cable Tie 8"	1 Pack of 100
HW.TWB450	Black UV Rated 120 lbs. Cable Tie 14"	1 Pack of 50
HW.TWB14100	Black UV Rated 120 lbs. Cable Tie 14"	1 Pack of 100

Acetal Banding Tool

Acetal Banding Tool		
PART #	DESCRIPTION	QTY
TOOL.ABIT	Cable Banding Installation Tool	1 Tool



Acetal Banding Locking Heads

Conveniently sold in 25, 50 and 100 packs

Acetal Banding Locking Heads		
PART #	DESCRIPTION	QTY
HW.BAND.LH	Locking Head for 1/2" Acetal Banding	1 Locking Head
HW.BAND.LH.25	Locking Head for 1/2" Acetal Banding	1 Pack of 25
HW.BAND.LH.50	Locking Head for 1/2" Acetal Banding	1 Pack of 50
HW.BAND.LH.100	Locking Head for 1/2" Acetal Banding	1 Pack of 100



Acetal Banding



Acetal Banding Rolls		
PART #	DESCRIPTION	QTY
HW.Banding.12-50F	Acetal Banding, 1/2" x 50' Roll	1 Roll

Color Tape

- General Series
- Select Series
- Premium Series



Color Tape		
PART #	DESCRIPTION	QTY
HW.ETAPE.BLK	Black Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.WHT	White Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.BLUE	Blue Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.BRN	Brown Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.GRAY	Gray Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.GRN	Green Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.ORG	Orange Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.RED	Red Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.PUR	Purple Tape 3/4" wide, 66' long	1 Roll
HW.ETAPE.YEL	Yellow Tape 3/4" wide, 66' long	1 Roll

Weatherproofing

Weatherproofing Kits provide a long term seal against the ingress of dust and moisture.

- Protect connectors and splices from the elements
- Suitable for most buried and exposed connections



Weather Proofing Kits		
PART #	DESCRIPTION	QTY
HW.WK.3M700612	3M 700 Series Weather Proofing Kit, (6) Butyl Mastic, (1) 2" PVC Tape, (2) 3/4" Tape	1 Pack
HW.WK.3M33612	3M 33+ Weather Proofing Kit, (6) Butyl Mastic, (1) 2" Tape, (2) 3/4" Tape	1 Pack
HW.3MTP333466	3M 33 Series 3/4" x 66' Vinyl Electrical Tape	1 Roll
HW.3MTP7003466	3M 700 Series 3/4" x 66' Vinyl Electrical Tape	1 Roll
HW.PVCTB0220	2" x 20' PVC Electrical Tape	1 Roll
HW.BTLTB0224	Butyl Mastic 2-1/2" x 24"	1 Roll
HW.TPSFSB11215	Self Fusing Tape 1 1/2"x 15' Black	1 Roll
HW.TPSFCSSB11215	Self Fusing Tape 1 1/2"x 15' Black with White Alignment Stripe	1 Roll

Dielectric Fish Paper



Fish Paper		
PART #	DESCRIPTION	QTY
HW.FP350	Dielectric Fish Paper, 3" x 50' without Adhesive	1 Roll
HW.FPA350	Dielectric Fish Paper, 3" x 50' with Adhesive	1 Roll
LG.FR-5X.010X50	Dielectric Fish Paper, 5" x 50' without Adhesive	1 Roll
LG.ADFR-5X.010X50	Dielectric Fish Paper, 5" x 50' with Adhesive	1 Roll

Poly Wax String



Poly Wax String		
PART #	DESCRIPTION	QTY
LC.9-8	9 Ply, Poly Wax String 175 yards	1 Roll

Identification Tags



Identification Tags		
PART #	DESCRIPTION	QTY
LG.FTGM145C	Mini-Gray Fiber, 145C Tag	1 Pack 100
LG.FIBERTAGD	Gray Fiber, 145P Tag	1 Pack 100
LG.145PTAG	White Plastic, 145P Tag	1 Pack 100
LG.Brasstag	Round Brass Tag 1-1/4"	1 Pack 100

4 Post Support Brackets

Four post support brackets include all mounting hardware.

- Hot dipped galvanized



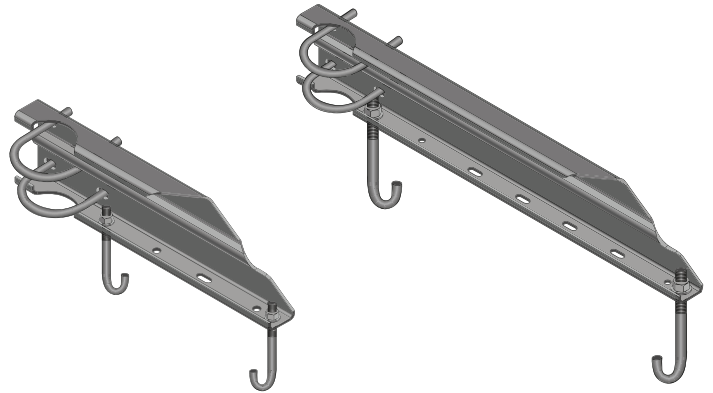
Double Post Support Bracket

PART #	DESCRIPTION	QTY
HW.BSD.24	24" Double Post Bridge Support Angle	1 Kit

Bridge Support Brackets

Bridge support brackets include all mounting hardware.

- Hot dipped galvanized
- Compatible with 12" and 24" safety grating

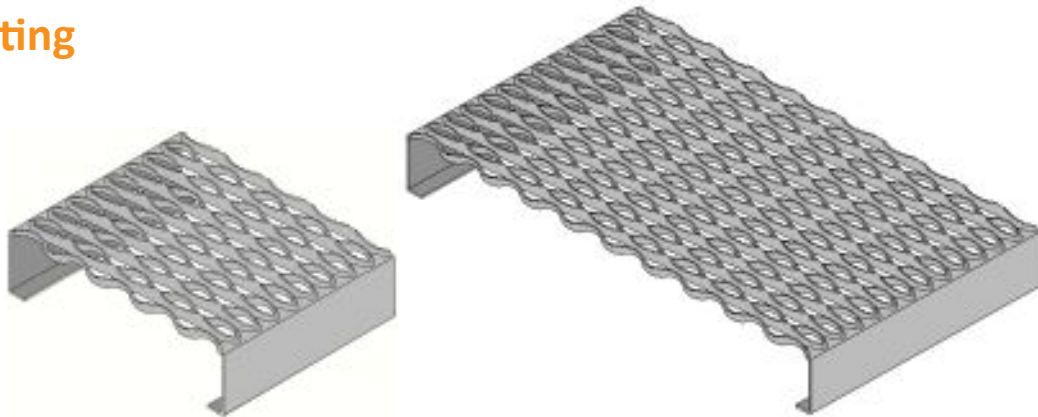


Single Post Support Bracket

PART #	DESCRIPTION	QTY
HW.BSSJB.12	12" Single Post Bridge Support (with j-bolts and hardware)	1 Kit
HW.BSSJB.24	24" Single Post Bridge Support (with j-bolts and hardware)	1 Kit

Safety Grating

- 12 Gauge
- 3" deep channel
- Galvanized steel

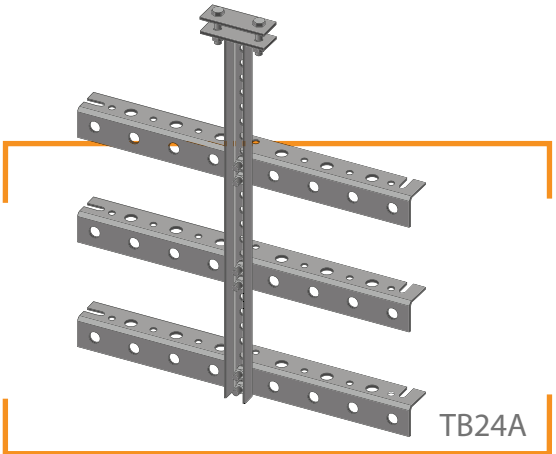
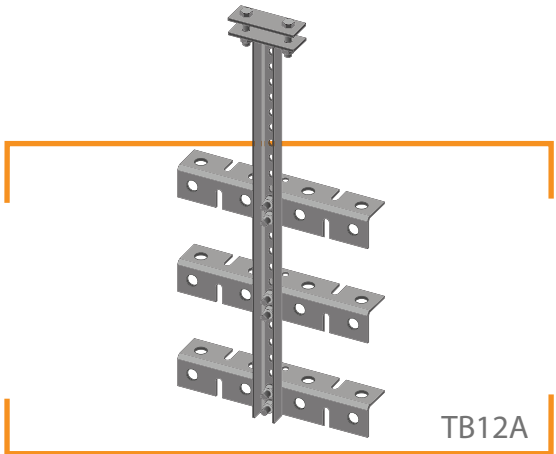
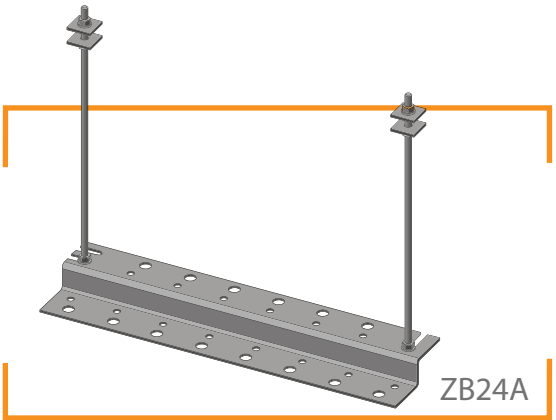
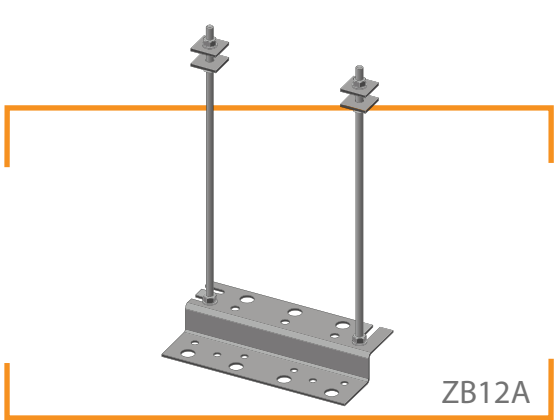


Safety Grating

PART #	DESCRIPTION	QTY
HW.SG.5x10	5" x 10' Safety Grating	1, 10' Stick
HW.SG.12x10	12" x 10' Safety Grating	1, 10' Stick
HW.SG.24x10	24" x 10' Safety Grating	1, 10' Stick

Hot Dipped Galvanized Brackets

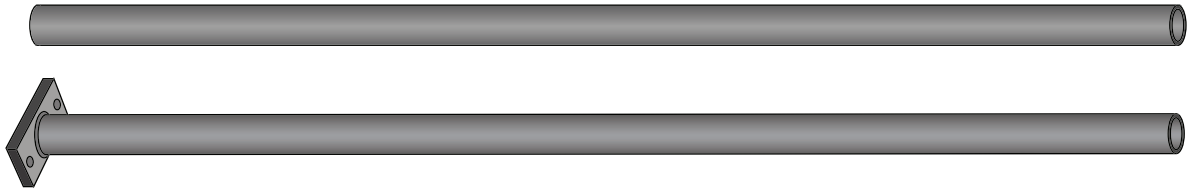
- Hot dipped galvanized
- Available with and without hardware
- Compatible with 12" and 24" safety grating



Bracket Kits		
PART #	DESCRIPTION	QTY
HW.ZB.12A	12" Z-Bracket Assembly	1 Assembly
HW.ZB.24A	24" Z-Bracket Assembly	1 Assembly
HW.TB.12A	12" T-Bracket Assembly 3 T-Bracket (Triple T)	1 Assembly
HW.TB.24A	24" T-Bracket Assembly 3 T-Bracket (Triple T)	1 Assembly

Bridge Posts

- 3-1/2" OD
- Direct burial
- Base shoe



Bridge Posts		
PART #	DESCRIPTION	QTY
HW.BPB.312.158	Bridge Post, Direct Burial, 3-1/2" OD x 13'-6"	1 Post
HW.BPB.312.126	Bridge Post, Base Shoe, 3-1/2" OD x 10'-6"	1 Post

2-3/8" Mast Pipe

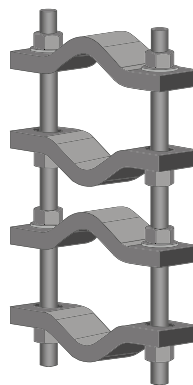
- Hot dipped galvanized
- Schedule 40



2-3/8" Mast Pipe		
PART #	DESCRIPTION	QTY
HW.PG.238.48	2-3/8" OD x 48" (60.3mm OD x 1.2m)	1 Stick
HW.PG.238.72	2-3/8" OD x 72" (60.3mm OD x 1.8m)	1 Stick
HW.PG.238.96	2-3/8" OD x 96" (60.3mm OD x 2.4m)	1 Stick
HW.PG.238.126	2-3/8" OD x 126" (60.3mm OD x 3.2m)	1 Stick
HW.PG.238.170	2-3/8" OD x 170" (60.3mm OD x 4.3m)	1 Stick

Pipe to Pipe Clamps

- Hot dipped galvanized
- Hardware included

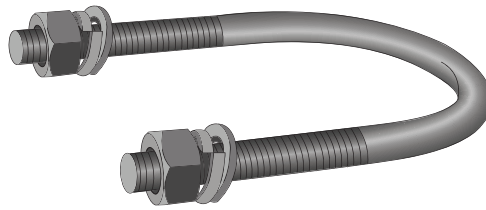


Pipe to Pipe Clamp Kits		
PART #	DESCRIPTION	QTY
HW.PP.112.312.14	Pipe to Pipe, 1-1/2" OD to 3-1/2" OD, Clamp Thickness 1/4"	1 Kit
HW.PP.112.312.12	Pipe to Pipe, 1-1/2" OD to 3-1/2" OD, Clamp Thickness 1/2"	1 Kit

U-Bolt Assemblies

U-Bolt assemblies include 2 nuts, 2 lock washers and 2 flat washers.

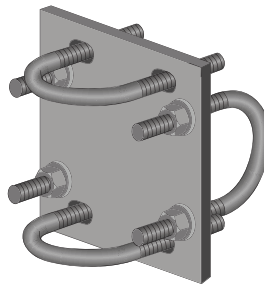
- Hot dipped galvanized



U-Bolt Assemblies		
PART #	DESCRIPTION	QTY
HW.BUGA.38.212.358	3/8" diameter, 2-1/2" throat, 3-5/8" length, 1-3/4" thread	1 U-Bolt Assembly
HW.BUGA.38.212.4	3/8" diameter, 2-1/2" throat, 4" length, 2" thread	1 U-Bolt Assembly
HW.BUGA.12.212.4	1/2" diameter, 2-1/2" throat, 4" length, 2" thread	1 U-Bolt Assembly
HW.BUGA.12.212.412	1/2" Diameter, 2-1/2" Throat, 4-1/2" Length, 2" Thread	1 U-Bolt Assembly
HW.BUGA.12.35	1/2" diameter, 3" throat, 5" length, 2" thread	1 U-Bolt Assembly
HW.BUGA.12.3.525	1/2" diameter, 3" throat, 5-1/4" length, 2" thread	1 U-Bolt Assembly
HW.BUGA.12.358.512	1/2" diameter, 3-5/8" throat, 5-1/2" length, 3" thread	1 U-Bolt Assembly

Cross Over Plates

- Hot dipped galvanized
- 3/8" thick plate
- Hardware included



Cross Over Plates		
PART #	DESCRIPTION	QTY
HW.CP.238.238	Cross Over Plate, 2-3/8" OD to 2-3/8" OD	1 Kit
HW.CP.238.278	Cross Over Plate, 2-3/8" OD to 2-7/8" OD	1 Kit
HW.CP.278.278	Cross Over Plate, 2-7/8" OD to 2-7/8" OD	1 Kit
HW.CP.312.238	Cross Over Plate, 3-1/2" OD to 2-3/8" OD	1 Kit

T-Bracket Mount

- Hot dipped galvanized
- Hardware included
- Compatible with round and angle members



T-Bracket Mount		
PART #	DESCRIPTION	QTY
HW.CTB.24.10	T-Bracket Mount, 13 Runs with 10" Rods	1 Kit
HW.CTB.13.10	T-Bracket Mount, 22 Runs with 10" Rods	1 Kit

Non Penetrating Roof Mount

Roof mounts include all hardware.

- Hot dipped galvanized
- Ballast not included
- Available in standard and light weight models
- 1/8" and 1/2" roof mount pads available



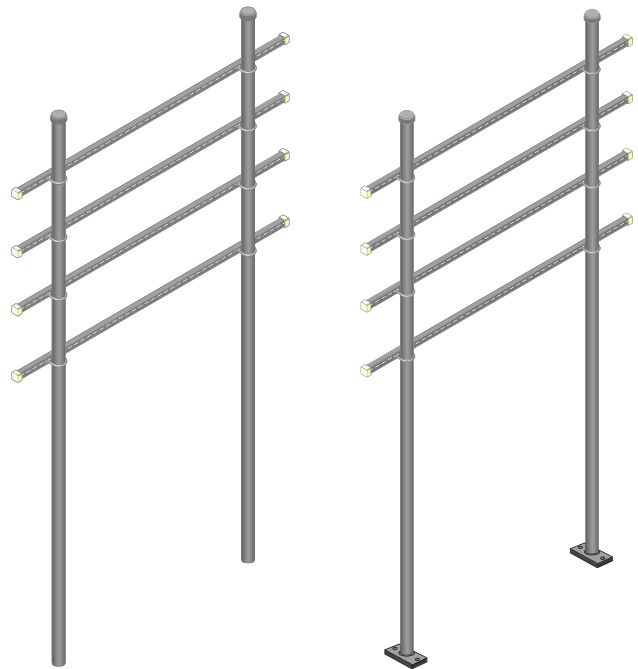
Single Non Penetrating Roof Mount		
PART #	DESCRIPTION	QTY
HW.RMBS.60	Non Pen Roof Mount, Single 2-3/8" x 60" Pipe	1 Kit
HW.RMBSL.60	Light Weight Non Pen Roof Mount, Single 1.34" x 60" Pipe	1 Kit
HW.RMBS.72	Non Pen Roof Mount, Single 2-3/8" x 72" Pipe	1 Kit
HW.RMBSL.72	Light Weight Non Pen Roof Mount, Single 1.34" x 72" Pipe	1 Kit

Non Penetrating Roof Mount Pads		
PART #	DESCRIPTION	QTY
HW.RMP.18.36x42	1/8" Thick Roof Mount Pad, 36" x 42" (1 pad required)	1 Pad
HW.RMP.12.18x48	1/2" Thick Roof Mount Pad, 18" x 48" (2 pads required)	1 Pad

H-Frames

H-Frames includes 4, 10' sticks of HDG slotted strut with white end caps, pipe caps and u-bolts.

- All hardware included
- Direct burial and base shoe options

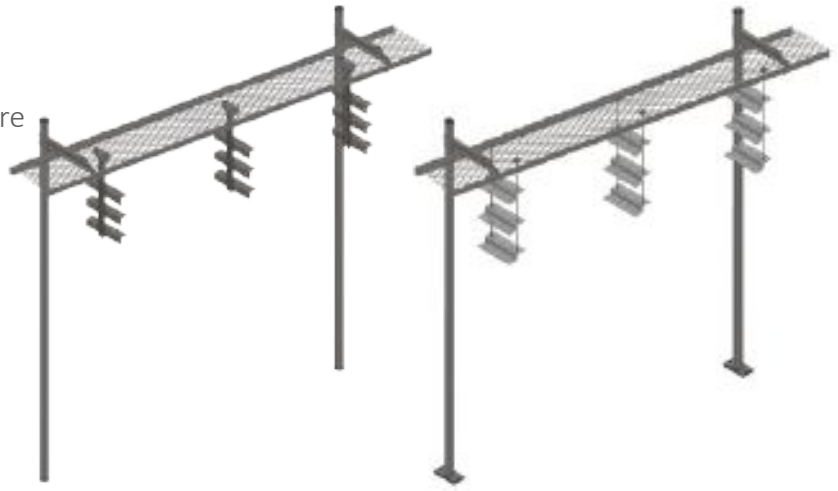


H-Frame		
PART #	DESCRIPTION	QTY
HW.HFD.4	4 Level H-Frame Direct Burial	1 Kit
HW.HFS.4	4 Level H-Frame Base Shoe	1 Kit

12" Bridge Kits

Bridge kits include brackets and all hardware

- 12 Gauge safety grating
- Available without trapeze and z-brackets



12" Bridge Kits		
PART #	DESCRIPTION	QTY
HW.CB.12.D3Z	Cable Bridge Direct Burial, 12" x 10' (3 Z-Brackets)	1 Kit
HW.CB.12.S3Z	Cable Bridge Base Shoe, 12" x 10' (3 Z-Brackets)	1 Kit

12" Bridge Kits		
PART #	DESCRIPTION	QTY
HW.CB.12.DTB	Cable Bridge Direct Burial, 12" x 10' (3 Triple T-Brackets)	1 Kit
HW.CB.12.STB	Cable Bridge Base Shoe, 12" x 10' (3 Triple T-Brackets)	1 Kit

24" Bridge Kits

Bridge kits include brackets and all hardware

- 12 Gauge safety grating
- Available without trapeze and z-brackets



24" Bridge Kits		
PART #	DESCRIPTION	QTY
HW.CB.34.D3Z	Cable Bridge Direct Burial, 24" x 10' (3 Z-Brackets)	1 Kit
HW.CB.24.S3Z	Cable Bridge Base Shoe, 24" x 10' (3 Z-Brackets)	1 Kit

24" Bridge Kits		
PART #	DESCRIPTION	QTY
HW.CB.24.DTB	Cable Bridge Direct Burial, 24" x 10' (3 Triple T-Brackets)	1 Kit
HW.CB.24.STB	Cable Bridge Base Shoe, 24" x 10' (3 Triple T-Brackets)	1 Kit

Slotted Strut Channel & Accessories

1-5/8" Slotted Strut Channel sold in ten foot sticks.

- Commercial grade
- 2" Hole spacing



Slotted Strut Channel		
PART #	DESCRIPTION	QTY
HW.SSGLV.158	Galvanized Slotted Strut Channel 1-5/8" x 10'	1, 10' Stick

Strut End Caps

- Caps for deep and shallow strut
- Available in red and white



Strut End Caps		
PART #	DESCRIPTION	QTY
HW.ENDCAP.78.WHT	7/8" Strut End Cap White	1 Cap
HW.ENDCAP.158.WHITE	1-5/8" Strut End Cap White	1 Cap
HW.ENDCAP.78.RED	7/8" Strut End Cap Red	1 Cap
HW.ENDCAP.158.RED	1-5/8" Strut End Cap Red	1 Cap

Spring Nuts

- Compatible with deep strut
- Available in hot dipped galvanized



Zinc Spring Nuts		
PART #	DESCRIPTION	QTY
HW.SPRINGNUT.14.Z	1/4" Spring Nut, Zinc Plated	1 Spring Nut
HW.SPRINGNUT.38.Z	3/8" Spring Nut, Zinc Plated	1 Spring Nut
HW.SPRINGNUT.12.Z	1/2" Spring Nut, Zinc Plated	1 Spring Nut

Square Washers

- Available in hot dipped galvanized



Square Washers		
PART #	DESCRIPTION	QTY
HW.SW.14.Z	1/4" Hole, 1-5/8" x 1-5/8" Square Washer, Zinc Plated	1 Square Washer
HW.SW.38.Z	3/8" Hole, 1-5/8" x 1-5/8" Square Washer, Zinc Plated	1 Square Washer
HW.SW.12.Z	1/2" Hole, 1-5/8" x 1-5/8" Square Washer, Zinc Plated	1 Square Washer

Galvanized Hex Lag Bolts

- Zinc finish available

Galvanized Hex Lag Bolts		
PART #	DESCRIPTION	QTY
HW.LAGB.38.7.4.GAL	Galvanized Hex Lag Bolt, 3/8"-7 x 4"	1 Bolt
HW.LAGB.12.6.25.GAL	Galvanized Hex Lag Bolt, 1/2"-6 x 2-1/2"	1 Bolt



Lag Shields

Lag Shields		
PART #	DESCRIPTION	QTY
HW.LAGSHIELD.38	Hex Lag Bolt, 3/8"-7 x 4"	1 Shield
HW.LAGSHIELD.12	Hex Lag Bolt, 1/2"-6 x 2-1/2"	1 Shield



Wedge Anchors

- Hardware included

Wedge Anchors		
PART #	DESCRIPTION	QTY
HW.WA.12.334.Z	Wedge Anchor, 1/2" x 3-3/4" , Zinc Plated	1 Wedge Anchor
HW.WA.12.412.Z	Wedge Anchor, 1/2" x 4-1/2" , Zinc Plated	1 Wedge Anchor
HW.WA.58.6.Z	Wedge Anchor, 5/8" x 6" , Zinc Plated	1 Wedge Anchor



Stainless Steel Fender Washers

Stainless Steel Fender Washers		
PART #	DESCRIPTION	QTY
HW.FENDERWASHER.14.SS	Stainless Steel Fender Washer, 1/4" x 1"	1 Fender Washer
HW.FENDWASH.38.1.SS	Stainless Steel Fender Washer, 3/8" x 1"	1 Fender Washer
HW.FENDWASH.38.118.SS	Stainless Steel Fender Washer, 3/8" x 1-1/8"	1 Fender Washer
HW.FENDWASH.38.125.SS	Stainless Steel Fender Washer, 3/8" x 1-1/4"	1 Fender Washer
HW.FENDWASH.38.150.SS	Stainless Steel Fender Washer, 3/8" x 1-1/2"	1 Fender Washer



Stainless Steel Flat Washers

Stainless Steel Flat Washers		
PART #	DESCRIPTION	QTY
HW.FWASHER.14.SS	Stainless Steel Flat Washer, 1/4"	1 Flat Washer
HW.FWASHER.38.SS	Stainless Steel Flat Washer, 3/8"	1 Flat Washer
HW.FWASHER.38SS.SOD	Stainless Steel Flat Washer, 3/8" Small OD	1 Flat Washer
HW.FWASHER.716.SS	Stainless Steel Flat Washer, 7/16"	1 Flat Washer
HW.FWASHER.12.SS	Stainless Steel Flat Washer, 1/2"	1 Flat Washer



Stainless Steel Lock Washers

Stainless Steel Lock Washers		
PART #	DESCRIPTION	QTY
HW.LW.14.SS	Stainless Steel Lock Washer, 1/4"	1 Lock Washer
HW.LW.38.SS	Stainless Steel Lock Washer, 3/8"	1 Lock Washer
HW.LW.716.SS	Stainless Steel Lock Washer, 7/16"	1 Lock Washer
HW.LW.12.SS	Stainless Steel Lock Washer, 1/2"	1 Lock Washer
HW.LW.58.SS	Stainless Steel Lock Washer, 5/8"	1 Lock Washer
HW.LW.78.SS	Stainless Steel Lock Washer, 7/8"	1 Lock Washer



Stainless Steel Toothed Washers

Stainless Steel Toothed Washers		
PART #	DESCRIPTION	QTY
HW.ITLW.14.SS	Stainless Steel Toothed Washer, 1/4"	1 Toothed Washer
HW.ITLW.38.SS	Stainless Steel Toothed Washer, 3/8"	1 Toothed Washer



- Galvanized and zinc finishes available
- Metric sizes available
- Available with

Stainless Steel Hex Nuts

Stainless Steel Hex Nuts		
PART #	DESCRIPTION	QTY
HW.HEXNUT.14.20.SS	Stainless Steel Hex Nut, 1/4"	1 Hex Nut
HW.HEXNUT.38.16.SS	Stainless Steel Hex Nut, 3/8"	1 Hex Nut
HW.HEXNUT.716.14.SS	Stainless Steel Hex Nut, 7/16"	1 Hex Nut
HW.HEXNUT.34.10.SS	Stainless Steel Hex Nut, 3/4"	1 Hex Nut
HW.HEXNUT.78.9.SS	Stainless Steel Hex Nut, 7/8"	1 Hex Nut



Stainless Steel Hex Bolts

Stainless Steel Hex Bolts		
PART #	DESCRIPTION	QTY
HW.HHMB.14.20.34SS	Stainless Steel Hex Head Bolt, 1/4"-20 x 3/4"	1 Hex Bolt
HW.HHMB.14.20.1SS	Stainless Steel Hex Head Bolt, 1/4"-20 x 1"	1 Hex Bolt
HW.HHMB.14.20.125SS	Stainless Steel Hex Head Bolt, 1/4"-20 x 1-1/4"	1 Hex Bolt
HW.HHMB.14.20.15SS	Stainless Steel Hex Head Bolt, 1/4"-20 x 1-1/2"	1 Hex Bolt
HW.HHMB.38.16.34SS	Stainless Steel Hex Head Bolt, 3/8"-16 x 3/4"	1 Hex Bolt
HW.HHMB.38.16.1SS	Stainless Steel Hex Head Bolt, 3/8"-16 x 1"	1 Hex Bolt
HW.HHMB.38.16.125SS	Stainless Steel Hex Head Bolt, 3/8"-16 x 1-1/4"	1 Hex Bolt
HW.HHMB.38.16.15SS	Stainless Steel Hex Head Bolt, 3/8"-16 x 1-1/2"	1 Hex Bolt
HW.HHMB.38.16.3SS	Stainless Steel Hex Head Bolt, 3/8"-16 x 3"	1 Hex Bolt
HW.HHMB.38.16.35SS	Stainless Steel Hex Head Bolt, 3/8"-16 x 3-1/2"	1 Hex Bolt
HW.HHMB.38.16.4SS	Stainless Steel Hex Head Bolt, 3/8"-16 x 4"	1 Hex Bolt
HW.HHMB.516.18.3SS	Stainless Steel Hex Head Bolt, 5/16"-18 x 3"	1 Hex Bolt
HW.HHMB.12.13.175SS	Stainless Steel Hex Head Bolt, 1/2"-13 x 1-3/4"	1 Hex Bolt
HW.HHMB.58.11.1SS	Stainless Steel Hex Head Bolt, 5/8"-11 x 1"	1 Hex Bolt
HW.HHMB.78.9.250SS	Stainless Steel Hex Head Bolt, 7/8"-9 x 2-1/2"	1 Hex Bolt



- For no shank use "FT" at end of part number for fully threaded
- Galvanized and zinc finishes available
- Metric sizes available

Adapter Hardware

Stainless Steel Adapter Hardware		
PART #	DESCRIPTION	QTY
HW.AH.SS.KIT.38	3/8" Stainless Steel Hardware Kit for Angle Adapters and Stand-Offs	1 Pack of 10
HW.AH.SS.TKIT.38	3/8" Tapped Universal Insert Kit for Angle Adapters and Stand-Offs	1 Pack of 10



Stainless Steel Threaded Rod

Stainless Steel Threaded Rod		
PART #	DESCRIPTION	QTY
HW.TR.SS.38.16x4	Stainless Steel Threaded Rod, 3/8"-16 x 4"	1 Rod
HW.TR.SS.38.16x6	Stainless Steel Threaded Rod, 3/8"-16 x 6"	1 Rod
HW.TR.SS.38.16x8	Stainless Steel Threaded Rod, 3/8"-16 x 8"	1 Rod
HW.TR.SS.38.16x10	Stainless Steel Threaded Rod, 3/8"-16 x 10"	1 Rod
HW.TR.SS.38.16x12	Stainless Steel Threaded Rod, 3/8"-16 x 12"	1 Rod
HW.TR.SS.38.16x24	Stainless Steel Threaded Rod, 3/8"-16 x 24"	1 Rod
HW.TR.SS.38.16x36	Stainless Steel Threaded Rod, 3/8"-16 x 36"	1 Rod
HW.TR.SS.38.16x72	Stainless Steel Threaded Rod 3/8"-16 x 72"	1 Rod
HW.TR.SS.58.11x1.189	Stainless Steel Threaded Rod 5/8"-11 x 1.189"	1 Rod



* Sold individually and packs of 10

Galvanized Threaded Rod

Galvanized Threaded Rod		
PART #	DESCRIPTION	QTY
HW.TR.G.38.16x4	Galvanized Threaded Rod, 3/8"-16 x 4"	1 Rod
HW.TR.G.38.16x6	Galvanized Threaded Rod, 3/8"-16 x 6"	1 Rod
HW.TR.G.38.16x8	Galvanized Threaded Rod, 3/8"-16 x 8"	1 Rod
HW.TR.G.38.16x10	Galvanized Threaded Rod, 3/8"-16 x 10"	1 Rod
HW.TR.G.38.16x12	Galvanized Threaded Rod, 3/8"-16 x 12"	1 Rod
HW.TR.G.38.16x24	Galvanized Threaded Rod, 3/8"-16 x 24"	1 Rod
HW.TR.G.38.16x36	Galvanized Threaded Rod, 3/8"-16 x 36"	1 Rod
HW.TR.G.38.16x72	Galvanized Threaded Rod, 3/8"-16 x 72"	1 Rod
HW.TR.G.58.11x12	Galvanized Threaded Rod, 5/8"-11 x 12"	1 Rod



* Sold individually and packs of 10

Mounting Bracket

Threaded Rod Mounting Bracket		
PART #	DESCRIPTION	QTY
HW.TR.MOUNT.38	Threaded Rod Mounting Bracket 3/8"	1 Pack of 10



Stainless Steel Threaded Rod Kit

Threaded Rod Kits include 10 threaded rods, 30 nuts, 30 lock washers and 20 flat washers.

Stainless Steel Threaded Rod Hardware Kits		
PART #	DESCRIPTION	QTY
HW.TR.SS.KIT.38.16x4	Stainless Steel 3/8"-16 x 4" Rod	1 Pack
HW.TR.SS.KIT.38.16x6	Stainless Steel 3/8"-16 x 6" Rod	1 Pack
HW.TR.SS.KIT.38.16x8	Stainless Steel 3/8"-16 x 8" Rod	1 Pack
HW.TR.SS.KIT.38.16x10	Stainless Steel 3/8"-16 x 10" Rod	1 Pack
HW.TR.SS.KIT.38.16x12	Stainless Steel 3/8"-16 x 12" Rod	1 Pack
HW.TR.SS.KIT.38.16x24	Stainless Steel 3/8"-16 x 24" Rod	1 Pack
HW.TR.SS.KIT.516.18x5	Stainless Steel 5/16"-18 x 5" Rod	1 Pack



Galvanized Threaded Rod Kit

Galvanized Threaded Rod Hardware Kits		
PART #	DESCRIPTION	QTY
HW.TR.G.KIT.38.16x4	Galvanized 3/8"-16 x 4" Rod	1 Pack
HW.TR.G.KIT.38.16x6	Galvanized 3/8"-16 x 6" Rod	1 Pack
HW.TR.G.KIT.38.16x8	Galvanized 3/8"-16 x 8" Rod	1 Pack
HW.TR.G.KIT.38-.16x10	Galvanized 3/8"-16 x 10" Rod	1 Pack
HW.TR.G.KIT.38.16x12	Galvanized 3/8"-16 x 12" Rod	1 Pack
HW.TR.G.KIT.58.11x12	Galvanized 5/8"-11 x 12" Rod	1 Pack

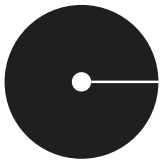


Threaded Rod Caps

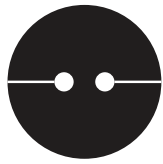
Threaded Rod Caps		
PART #	DESCRIPTION	QTY
HW.TR.CAP.38.Black	Cap, Rod, 3/8" Black	1 Cap
HW.TR.CAP.38.Red	Cap, Rod, 3/8" Red	1 Cap



Cushion Hole Configurations



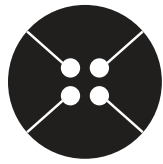
EB.Cushion.1.12



EB.Cushion.2.12



EB.Cushion.3.12



EB.Cushion.4.12



EB.Cushion.5.12



EB.Cushion.6.12



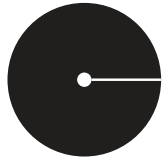
EB.Cushion.7.12



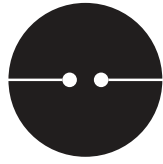
EB.Cushion.9.12



EB.Cushion.1.32



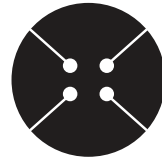
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EB.Cushion.2.38



EB.Cushion.3.38



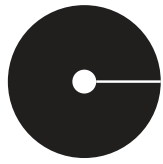
EB.Cushion.4.38



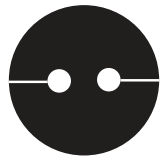
EB.Cushion.5.38



EB.Cushion.9.38



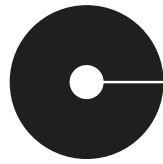
EB.Cushion.1.58



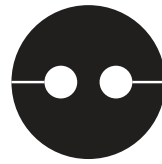
EB.Cushion.2.58



EB.Cushion.3.58



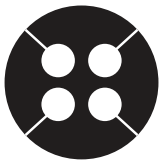
EB.Cushion.1.78



EB.Cushion.2.78



EB.Cushion.3.78



EB.Cushion.4.78



EB.Cushion.1.114



EB.Cushion.2.114



EB.Cushion.1.158



EB.Cushion.1.214

Universal Hanger Inserts Hole Configurations



HW.HIU.4-10
(4-10mm)



HW.HIU.6-13
(6-13mm)



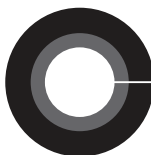
HW.HIU.3x6-13
(6-13mm x3)



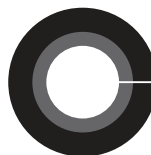
HW.HIU.10-20
(10-20mm)



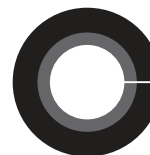
HW.HIU.13-18
(13-18mm)



HW.HIU.17-22
(17-22mm)



HW.HIU.22-31
(22-31mm)



HW.HIU.30-40
(30-40mm)

Single Hole Hanger Inserts Hole Configurations



HW.HI.171



HW.HI.201



HW.HI.241



HW.HI.261



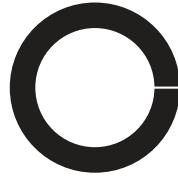
HW.HI.301



HW.HI.331



HW.HI.361

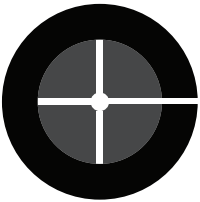


HW.HI.401

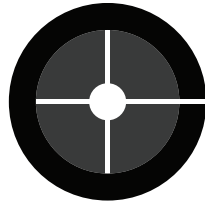


HW.HI.431

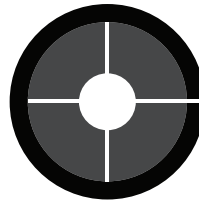
Wide Range Universal Hanger Inserts Hole Configurations



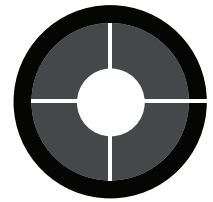
HW.HIU.4-15
(4-15mm)



HW.HIU.14-25
(14-25mm)



HW.HIU.20-36
(20-36mm)



HW.HIU.25-45
(25-45mm)

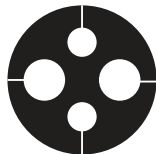
Multi Hole Universal Hanger Inserts Hole Configurations



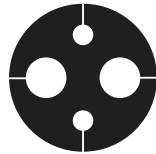
HW.HIM.2.11-1.7



HW.HIM.2.14-1.7



HW.HIM.2.10-2.7



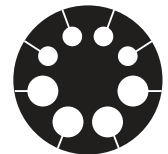
HW.HIM.2.13-2.7



HW.HIM.1.23.35-1.7



HW.HIM.1.24-1.10



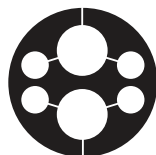
HW.HIM.4.11-4.7



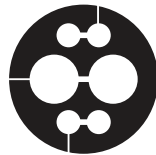
HW.HIM.2.20-1.10



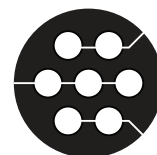
HW.HIM.6.8.10.12.14.26



HW.HIM.4.11-2.16



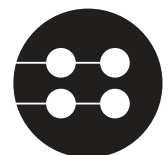
HW.HIM.2.15-4.7



HW.HIM.7.11



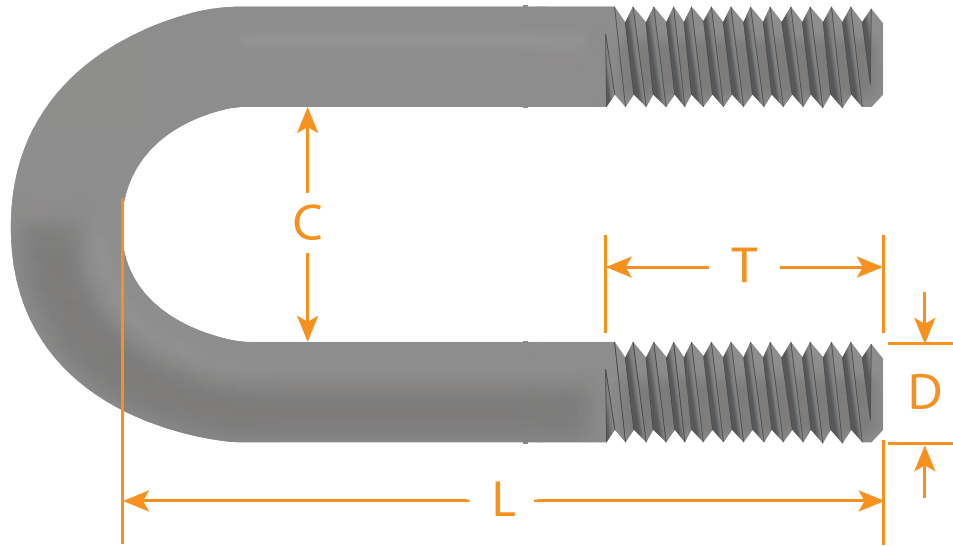
HW.HIM.2.20



HW.HIM.4.16

U-Bolt Dimensions

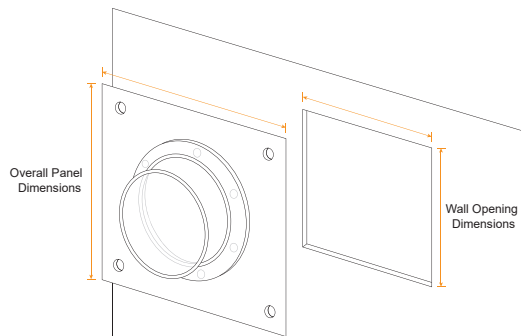
D X C X L X T



U-Bolt Assemblies						
PART #	DESCRIPTION	C	D	L	T	
HW.BUGA.38.212.358	3/8" diameter, 2-1/2" throat, 3-5/8" length, 1-3/4" thread	2-1/2"	3/8"	3-5/8"	1-3/4"	
HW.BUGA.38.212.4	3/8" diameter, 2-1/2" throat, 4" length, 2" thread	2-1/2"	3/8"	4"	2"	
HW.BUGA.12.212.4	1/2" diameter, 2-1/2" throat, 4" length, 2" thread	2-1/2"	1/2"	4"	2"	
HW.BUGA.12.212.412	1/2" diameter, 2-1/2" throat, 4-1/2" length, 2" thread	2-1/2"	1/2"	4-1/2"	2"	
HW.BUGA.12.35	1/2" diameter, 3" throat, 5" length, 2" thread	3"	1/2"	5"	2"	
HW.BUGA.12.3.525	1/2" diameter, 3" throat, 5-1/4" length, 2" thread	3"	1/2"	5-1/4"	2"	
HW.BUGA.12.358.512	1/2" diameter, 3-5/8" throat, 5-1/2" length, 3" thread	3-5/8"	1/2"	5-1/2"	3"	

Entry Panels 4" Port			
PART #	DESCRIPTION	WALL OPENING	OVERALL SIZE
E220	4" 1 port, 1 x 1	4" x 4"	7" x 7"
E1448	4" 2 port, 1 x 2	4" x 10"	9.5" x 15.5"
E1635	4" 3 port, 1 x 3	4" x 15"	9.5" x 20"
E575	4" 4 port, 1 x 4	4" x 20.5"	9.5" x 25.5"
E1477	4" 6 port, 1 x 6	4" x 30.5"	9.5" x 36.5"
E1199	4" 4 port, 2 x 2	9.5" x 11"	17.5" x 17.5"
E1449	4" 6 port, 2 x 3	9.5" x 15"	17.5" x 23"
E576	4" 8 port, 2 x 4	9.5" x 20.5"	17.5" x 25.5"
E1297	4" 10 port, 2 x 5	9.5" x 24.5"	17.5" x 31"
E1336	4" 12 port, 2 x 6	9.5" x 31.5"	17.5" x 39.5"
E1033	4" 9 port, 3 x 3	15" x 15"	23" x 23"
E1118	4" 12 port, 3 x 4	15" x 20.5"	25.5" x 25.5"
E1333	4" 18 port, 3 x 6	15" x 31.5"	25.5" x 39.5"
E1447	4" 16 port, 4 x 4	20.5" x 20.5"	25.5" x 25.5"
E1340	4" 24 port, 4 x 6	20.5" x 31.5"	31" x 39.5"

Entry Panel Wall Dimensions



Entry Panels 5" Port			
PART #	DESCRIPTION	WALL OPENING	OVERALL SIZE
E549	5" 1 port, 1 x 1	5" x 5"	9.5" x 9.5"
E550	5" 2 port, 1 x 2	5" x 12"	9.5" x 17.5"
E551	5" 3 port, 1 x 3	5" x 19"	9.5" x 25.5"
E552	5" 4 port, 2 x 2	12" x 12"	17.5" x 17.5"
E553	5" 6 port, 2 x 3	12" x 26"	17.5" x 25.5"

