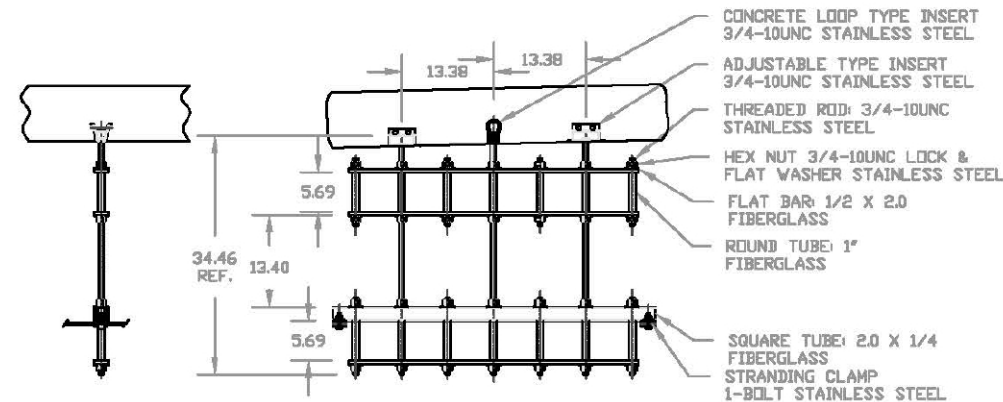
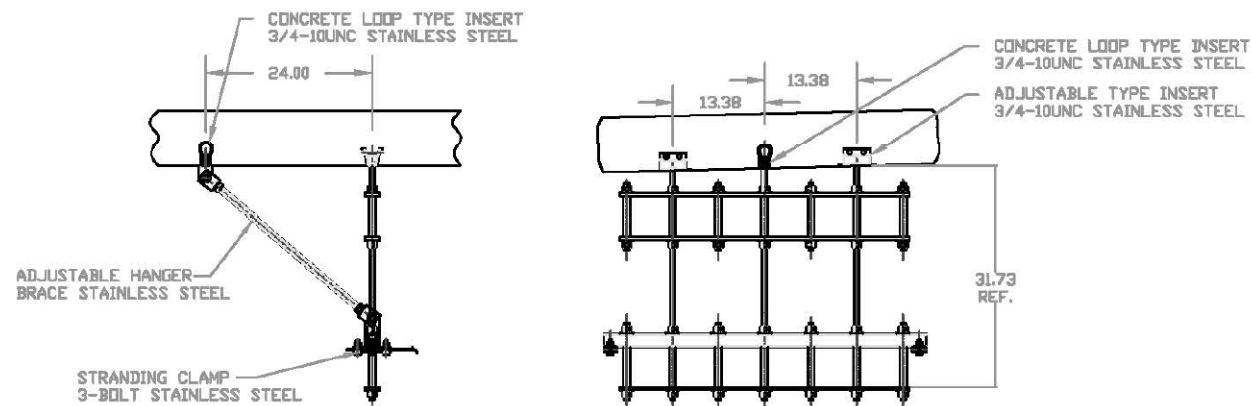


This drawing is the property of Condux International, Inc. and the information thereon is to be treated as confidential. It is not to be used, copied or disclosed to outside parties without our written consent.



STANDARD SUPPORT HANGER WITH STRANDING CLAMPS



ABUTMENT SUPPORT HANGER WITH STRANDING CLAMPS AND BRACING

FOR INFORMATION ONLY  
WORK TO BE PERFORMED BY OTHERS  
WITH THE EXCEPTION OF PLACEMENT  
OF INSERTS INTO SUPERSTRUCTURE

NOTE  
NO PART OF THE CONDUIT SUPPORT HANGER  
CAN EXTEND BELOW THE BRIDGE DECK  
GIRDER  
EXTENDED RODS MAY NEED TO BE ALTERED

Condux International, Inc. Support hanger meet the following specifications

- Fiberglass Items**  
 Flat Bar: 1/2 x 2.0  
 Round Tube: 1.0" O.D., .105 wall  
 Square Tube: 2 x 2 x 1/4  
 Fiberglass reinforced with polyester resin with surface veil for better weathering, resin shall contain u.v. inhibitor. Fiberglass is made with continuous strand mat and uni-directional raving, gray in color  
 Tensile Strength (ASTM D 638) 30,000 PSI  
 Tensile Modulus (ASTM D 638) 2.3E6 PSI  
 Flexural Strength (ASTM D 790) 30,000 PSI  
 Flexural Modulus (ASTM D 790) 2.3E6 PSI  
 Compressive Strength (ASTM D 695) 20,000 PSI  
 Compressive Modulus 1.4E6 PSI  
 Yield shear strength 2000 PSI  
 Barcol hardness 50  
 Dielectric strength (ASTM D 149) 200 VPM Min.

**Stainless steel Hardware Items**

- Threaded Rod  
 Threaded rod meets (ASTM/ASME B1.1) (ASTM A307 Grade A) (Tensile Strength 60,000 PSD)  
 Hexnut  
 Hexnut meets (ANSI/ASME B18.2.2) Material: 316 Stainless steel (ASTM F594)  
 Flatwasher  
 Flatwasher meets (ANSI/ASME B18.22.1) Material: 316 stainless steel (ASTM F436)  
 Lockwasher  
 Lockwasher meets (ANSI/ASME B18.21.1) Material: 316 Stainless steel (ASTM F436)  
**Stranding Items**  
 Stranding Clamps (1-Bolt & 3-Bolt)  
 Material: 1/4 x 1.5 (316 Stainless Steel)  
 Stranding Wire  
 Cable: 1/4" Dia (7 X 19 Steel Aircraft)  
 304 Stainless Steel  
**Bracing**  
 Adjustable hanger attachment brackets  
 Material: angle 2.5 x 2.5 x .25 (316 Stainless steel)

DRAWING APPROVAL  
 I APPROVE THIS DRAWING FOR MANUFACTURING  
 DATE: \_\_\_\_\_

Note:  
 ALL MEASUREMENTS ARE IN INCHES UNLESS NOTED OTHERWISE

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

CURRENT BILL OF MATERIAL

ITEM NO.	PART NO.	DESCRIPTION	QTY	UNIT
1	TBA	STANDARD CONDUIT SUPPORT HANGER 2 HIGH X 6 WIDE FIBERGLASS AND STAINLESS STEEL, OPENING FOR EIGHT 5" FGL DUCTS THREADED RODS THREE @ 3/4-10UNC X 38.00 LONG	26	EA
2	0840236	HANGER BRACE ADJUSTABLE: 36 INCH STAINLESS STEEL	6	EA
3	08409990	CONCRETE INSERT: 3/4-10 LOOP TYPE, STAINLESS STEEL	32	EA
4	08558300	CONCRETE INSERT SETTING PLUG 3/4-10	32	EA
5	08409929	CONCRETE INSERT ADJUSTABLE: 3/4-10 STAINLESS STEEL	52	EA
6	08408950	STRANDING WIRE: 1/4 X 900 FT., STAINLESS STEEL	2	EA
7	08409404	GUY STRAND CLAMP 3-BOLT, STAINLESS STEEL	6	EA
8	08409504	GUY STRAND CLAMP 1-BOLT, STAINLESS STEEL	46	EA
9	08460053	CONDUIT FIBERGLASS: 5" IPS, MV (3.57 O.D. X .096 WALL) MEETING NEMA TC-14A	2240	FT.
10	08460153	CONDUIT STOP COUPLING 5" IPS MV	10	EA
11	08460453	CONDUIT EXPANSION JOINT O-RING TYPE: 5" IPS MV	16	EA
12	08460953	CONDUIT SPLIT STOP RING 5" IPS MV	16	EA
13	08461333	CONDUIT ADAPTER: 5" IPS MV TO 5" GRC	16	EA
14	08463402	CONDUIT EPOXY ADHESIVE CARTRIDGE	25	EA
15	02280990	CONDUIT EPOXY ADHESIVE GUN	1	EA

General Construction, Hanger and Conduit Notes

- 1.0 Recommended spacing between Support is 10 Foot.
- 2.0 Support Hanger Material shall be manufactured using 316 stainless steel and fiberglass components.
- 3.0 Conduit is 5 inch Fiberglass with minimum wall thickness of .096 inch meeting NEMA TC- 14A Specs.
- 4.0 Conduit joints shall be positive locking adhesive bonded bell and spigot.
- 5.0 Conduit expansion joints shall be sliding sleeve with provision for 8 inch of travel.
- 6.0 Bridge abutments must have a block out or be sleeved to allow the fiberglass conduit to pass through. After conduit is placed through abutment seal up opening with state approved sealant.
- 7.0 Place concrete inserts for future support system. Hangers will be installed at a later date.
- 8.0 Conduit support hangers weight 2525 LBS total  
 Fiberglass conduit weight 2807 LBS total  
 cable weight weight 18,942 LBS total

Grand total being placed on the bridge is 24,274 LBS.

CONDUIT SUPPORT HANGER DETAIL AND BILL OF MATERIALS

CONDUX INTERNATIONAL, INC.  
 MANKATO MN  
 PH. 800-533-2077

Project: ComEd  
 Peoria Street Bridge over F.A.I. 290  
 Eisenhower Expressway, Cook County Illinois

WEIGHT: 0.0 LBS EA

SIZE FSCM NO. DWG NO. REV  
 TBA

QUOTE NO. 3985214497

SCALE 1/2 DATE: 10-03-2013 SHEET 183 OF 356