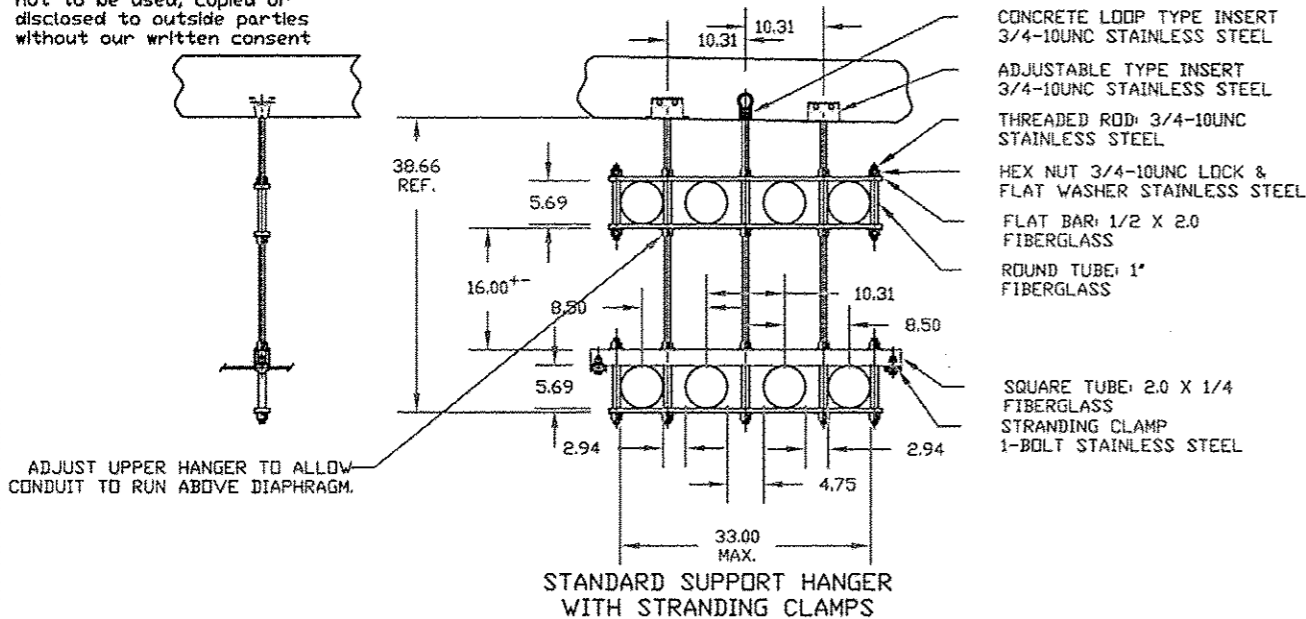
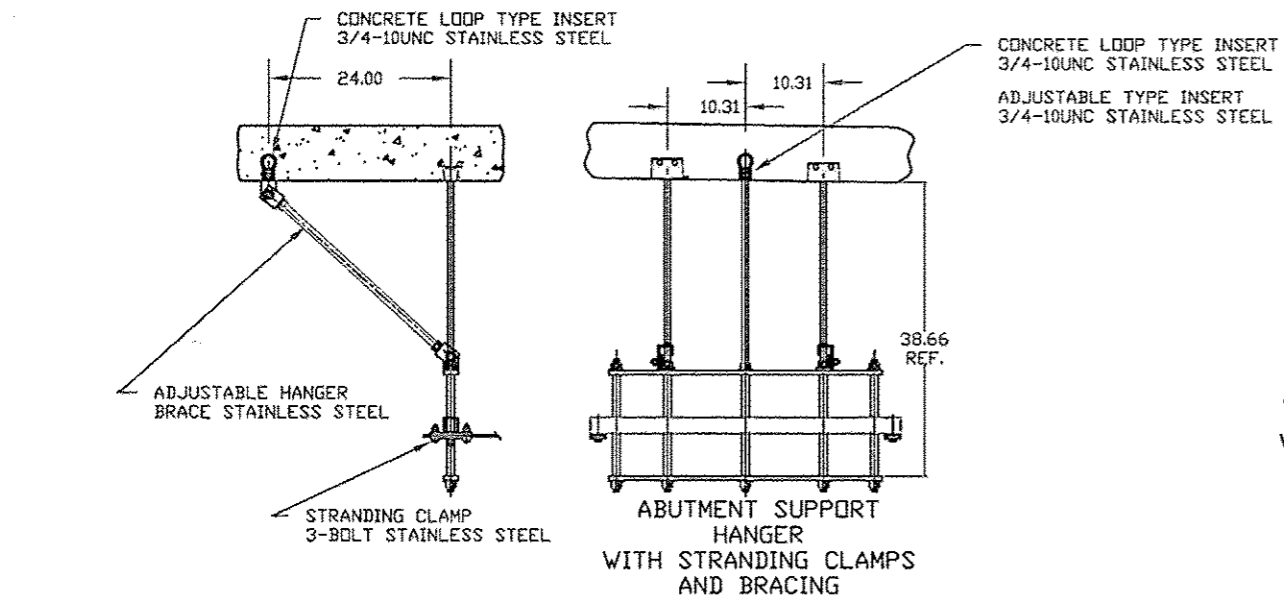


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ADJUST UPPER HANGER TO ALLOW CONDUIT TO RUN ABOVE DIAPHRAGM.



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 roving.  
 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 PSI)  
 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)

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

DRAWING APPROVAL  
 I APPROVE THIS DRAWING FOR MANUFACTURING DATE: \_\_\_\_\_  
 Note:  
 ALL MEASUREMENTS ARE IN INCHES UNLESS NOTED OTHERWISE

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	2.0	ADDENDUM A	10/15/2013	BRIAN



CURRENT BILL OF MATERIAL

ITEM NO.	PART NO.	DESCRIPTION	QTY	UNIT
1	26125F3S24	ABUTMENT 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 42.00 LONG	2	EA.
2	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 42.00 LONG	54	EA.
3	08610236	HANGER BRACE ADJUSTABLE: 3/8 INCH STAINLESS STEEL	8	EA.
4	08409990	CONCRETE INSERT: 3/4-10 LOOP TYPE, STAINLESS STEEL	64	EA.
5	08558300	CONCRETE INSERT SETTING PLUG: 3/4-10	64	EA.
6	TBA	CONCRETE INSERT ADJUSTABLE: 3/4-10 STAINLESS STEEL	112	EA.
7	08408951	STRANDING WIRE: 1/4 X 1000 FT., STAINLESS STEEL	2	EA.
8	08409404	GUY STRAND CLAMP: 3-BOLT, STAINLESS STEEL	8	EA.
9	08409504	GUY STRAND CLAMP: 1-BOLT, STAINLESS STEEL	104	EA.
10	08460053	CONDUIT FIBERGLASS: 5" IPS, MW (.57 O.D. X .096 WALL) MEETING NEMA TC-14A	4480	FT.
11	08460153	CONDUIT STOP COUPLING: 5" IPS MW	40	EA.
12	08460453	CONDUIT EXPANSION JOINT O-RING TYPE: 5" IPS MW	24	EA.
13	08460953	CONDUIT SPLIT STOP RING: 5" IPS MW	32	EA.
14	08461553	CONDUIT ADAPTER: 5" IPS MW TO 5" GRC	16	EA.
15	TBA	CONDUIT SWEEP: 5" IPS MW 11.25 DEGREE X 25FT RADIUS	16	EA.
16	08460253	CONDUIT 5 DEG. ANGLE COUPLING: 5" IPS MW	16	EA.
17	08463402	CONDUIT EPOXY ADHESIVE CARTRIDGE	35	EA.
18	02288990	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 2325 LBS total  
 Fiberglass conduit weight 5600 LBS total  
 cable weight weight 37884 LBS total

Grand total being placed on the bridge is 45809.00 LBS. OR 199.00 LBS/FT.

CONDUIT SUPPORT HANGER DETAIL AND BILL OF MATERIALS		CONDUX INTERNATIONAL, INC. MANKATO MN PH. 800-533-2077		
Project: ComEd Halsted Street Bridge over F.A.I. RTE 290 Eisenhower Expressway, Cook County Illinois		SIZE	FSCM NO.	DWG NO.
WEIGHT: 0.0 LBS EA				TBA
QUOTE NO. 3985214499	SCALE 1/2	DATE: 09-27-2013	SHEET 441C OF 559	
			SHEET: CONDUX 6 OF 6	REV 1.0