

INSTALLATION INSTRUCTIONS FOR T&B EYS SERIES VERTICAL SEALING FITTINGS

— NOTICE —

This document should remain on file for any future reference.



— WARNING —

De-energize all electrical circuits prior to and during any installation and maintenance.

Improperly installed sealing fittings are ineffective, and could result in a hazard or possibly death.

Only experienced, qualified installers should be entrusted with installing, preparing the dam, and mixing and pouring the compound into any sealing fitting.

Install Sealing Fittings in electrical systems in accordance with the NEC and any specified engineering requirements and/or local codes.

All mixing containers must be thoroughly cleaned and free of any contamination prior to mixing any compound. Contamination could result in an improper seal within the sealing fitting, which could result in a hazard or possibly death.

The location of the sealing fitting is extremely important in an electrical system. Take precaution to locate the fitting in the exact location specified by all engineering requirements, the NEC requirement, and/or all local codes.

Clean all debris and any foreign material from inside surfaces of the sealing fitting. Sealing compound must adhere to the inside surface of sealing fitting. If surface is not clean and dry, adhesion may not occur.

Install the sealing fitting into the conduit system with the "Pour Hole" upward and easily accessible (See Figure 1). The conduit can only enter each end of the fitting. **Do not install conduit into the "Pour Hole".**

— NOTICE —

Maximum Conductor Fill for Sealing Fittings are listed in the Table in the back of the document (see attached). This is based on 25% fill data derived from NEC 1999, Table C8.

Pull all the required conductors in the conduit system through the sealing fitting. The conductor insulation must be continuous as it passes through the sealing fitting. Any abrasion, nick, cut or discontinuity of the conductor sheathing will result in a poor seal and/or the risk of electrical shock. Care must be taken when conductors are being pulled to prevent damage to the conductor and/or insulation. Any damaged conductor must be replaced prior to pouring the sealing compound into the sealing fitting. Make sure all conductors passing through the sealing fitting are clean and dry.

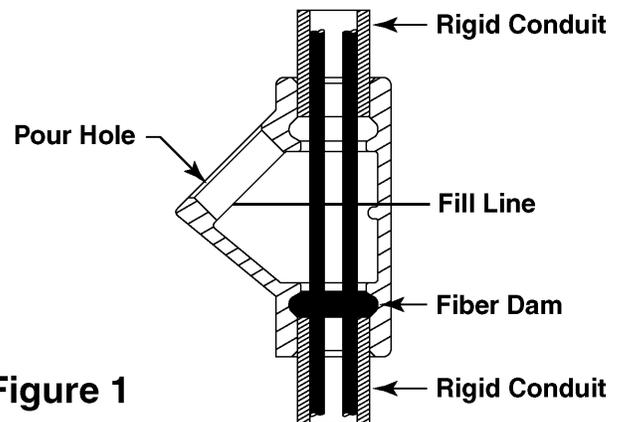


Figure 1



— CAUTION —

The sealing fitting cannot be used as a junction box. Do not splice conductors together inside any sealing fitting.

Remove the "Pour Plug" from sealing fitting. The "Pour Hole" in the sealing fitting must be open upward and easily accessible. Make certain the sealing fitting is attached securely onto both conduit runs. Do not pour sealing compound into an improperly installed sealing fitting. Verify the conductors are continuous, without interruptions, and the conductor sheathing is not damaged.



— WARNING —

T&B EYS series Sealing Fittings are to be used only with the following Sealing Compound Systems:

Crouse Hinds' Chico® A series Sealing Compound
Crouse Hinds' Chico® X series Sealing Fiber

DO NOT MIX MANUFACTURERS' SEALING COMPOUND SYSTEMS.

Only use Crouse Hinds' Chico® X fiber with Crouse Hinds' Chico® A or APX compound.

Step 1: Vertical Packing Sealing Fiber

Pack fiber into lower section of sealing fitting.

Accumulate all of the conductors into one bundle in the center of the sealing fitting. Insert packing fiber through "Pour Hole" into the lower section of the sealing fitting. Loosely pack sealing fiber by completely encircling the conductor bundle. Sealing fiber must be located no higher than the "Conduit Bushing/End Stop", inside the lower section of the sealing fitting.

Spread conductor bundle by separating each conductor. Pack sealing fiber into the space created by separating the conductors. Special care should be taken to isolate each conductor inside the sealing fitting. Maximize the distance between all conductors and the body of the sealing fitting by separating the conductors. No conductor may come in contact with any other conductor or any inner surface of the sealing fitting between the sealing fiber on bottom and the "Conduit Bushing/End Stop" on top. The sealing fiber should be packed no higher than the "Conduit Bushing/End Stop" and dense enough to restrict the liquid sealing compound from passing. The fiber must not fray into the body of the sealing fitting. All sealing fiber must be confined to the "Conduit Bushing/End Stop" section of the fitting.

Step 2: Prepare Sealing Compound for:

CROUSE HINDS' SEALING COMPOUND

Pay close attention to instructions on Sealing Compound.

A) Instructions for use with Crouse Hinds' Chico® Sealing Compound:

DIRECTIONS AND WARNINGS SUPPLIED WITH SEALING COMPOUND ARE TO BE FOLLOWED EXACTLY:

Prepare Chico® sealing compound as instructed using a clean mixing vessel for each batch. Mix two part compound to one part cold water by volume. Mixture must be blended immediately to a smooth consistency with no lumps. Do not mix more compound than can be poured in 15 minutes.

B) Instructions for use with Crouse Hinds' Chico® APX Sealing Compound Intrapak:

DIRECTIONS AND WARNINGS SUPPLIED WITH SEALING COMPOUND ARE TO BE FOLLOWED EXACTLY:

Squeeze pouch until inner liquid container breaks. Shake pouch until compound and water are thoroughly mixed. Remove screw cap, insert flexible spout and pour into fitting.



If tools are needed to aid in packing the sealing fiber, use only blunt tipped non-metallic objects for packing. Do not use a sharp pointed object, i.e.: screw driver, that may nick or scratch the insulated jacketing of the conductors and jeopardize the seal.

FOR ALL APPLICATIONS

THIS IS NOT AN INSULATING COMPOUND AND MUST NOT BE USED FOR SUCH PURPOSE.

If any batch of compound starts to set before pouring, do NOT try to thin by adding water or stirring. This will spoil seals. Discard the batch and make a new one.

KEEP compound dry by having container cover tightly closed when not in use.



— CAUTION —



- **Prepare dam(s) before mixing compound. After pouring, close the opening immediately.**
- **Sealing compound to be mixed ONLY at temperatures above 40°F (2°C) and ONLY poured into fittings that have been brought to a temperature above 40°F (4.4°C). Seals must NOT be exposed to temperature below 40°F (4.4°C) for at least 72 hours.**
- **Material hardens and becomes warm to touch. May cause skin, eye and respiratory irritation. Do not rinse down drain as it may harden in pipes.**

Step 3: Pour Sealing Compound

Pour prepared sealing compound into the sealing fitting through "Pour Hole". Lightly tap on fitting assembly to disperse and level sealing compound in and around the sealing fitting and conductors. Be sure to top off compound if settling occurs. Care must be taken to ensure sealing compound is flowing into the sealing fitting. If a funnel is used to direct the sealing compound into the sealing fitting, make sure the funnel is clean and dry before using. Fill sealing fitting until sealing compound level is at the sealing compound "Fill Line" inside sealing fitting. Never under-fill any sealing fitting. Always mix enough sealing compound to seal the fitting. Sealing compound cannot be "stacked or layered" inside a sealing fitting.

Step 4: Replace Cover Plug

Install "Pour Plug" into the pour opening and tighten until secure.

Step 5: Mark the Fitting Complete

(Suggested practice)

Many installers mark the sealing fitting complete by painting or equivalent method once the sealing compound has been poured and cured.

INSTALLATION INSTRUCTIONS FOR T&B EYD SERIES VERTICAL SEALING FITTINGS



— CAUTION —

For an effective seal, the sealing compound must completely surround each conductor.

EYS1-TB SERIES

TRADE SIZES 1/2", 3/4" 1", 1-1/4", 1-1/2"

Follow all vertical pour instructions for EYS fittings.

Pull conductors through following the fill requirements detailed in the table on page 4.

Access the inside of sealing fitting by removing the pipe plug. (To facilitate packing of fiber dam, the seals are provided with one trade size larger opening). Pack fiber dam into the lower section following installation instruction for vertical orientation (see Step 1 on page 2).

Pour sealing compound following instructions provided in step 2, 3, 4 and 5.

EYS1-TB SERIES EYS SEALING FITTING (VERTICAL ONLY)

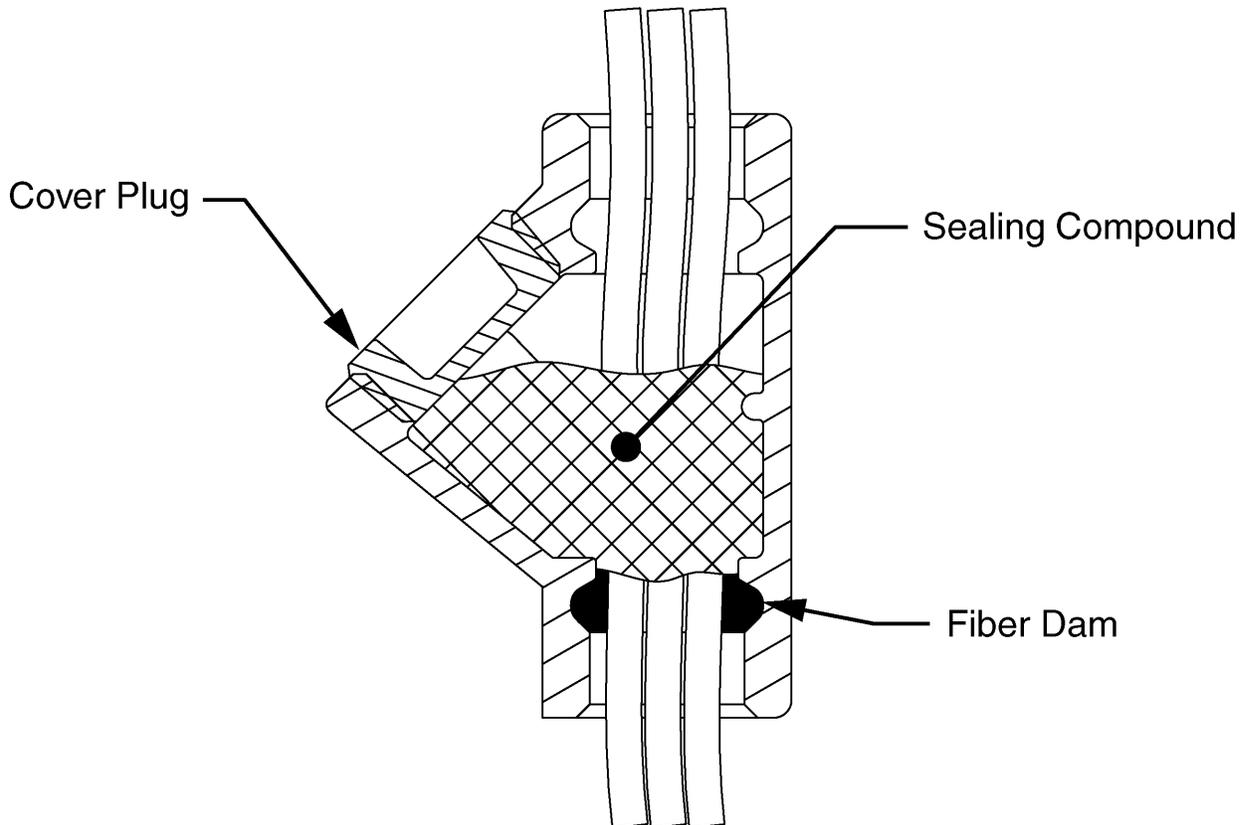
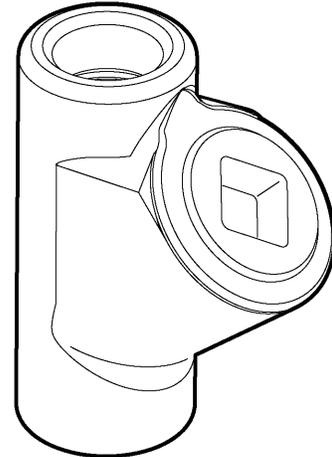


Figure 2

Maximum number of conductors that can be sealed in a fitting.

The maximum number of wire (a), (b) that can be sealed in a sealing fitting are as follows:																									
Size AWG or MCM	1/2 Inch		3/4 Inch		1 Inch		1-1/4 Inch		1-1/2 Inch		2 Inch		2-1/2 Inch		3 Inch		3-1/2 Inch		4 Inch		5 Inch		6 Inch		
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	
18	7	11	12	20	20	33	35	58	49	80	80	131	115	187	176										
16	6	9	10	16	17	27	30	47	41	64	68	106	98	151	150										
14	3	8	6	15	10	24	18	43	25	58	41	96	58	137	90		121		155						
12	3	6	5	11	8	18	15	32	21	43	34	71	50	102	76	158	103		132						
10	1	4	4	7	7	11	13	20	17	27	29	45	41	65	64	100	86	134	110	172	173				
8	1	2	2	4	4	6	7	11	9	16	16	26	22	37	35	58	47	78	60	100	94	157	137		
6	1	1	1	2	2	4	4	7	6	9	10	16	15	23	23	35	32	47	41	61	64	96	93	139	
4	1	1	1	1	1	2	3	4	5	6	8	9	12	14	18	21	24	29	31	37	49	59	72	85	
3			1	1	1	2	3	3	4	5	7	8	10	12	16	18	21	24	28	31	44	50	63	72	
2			1	1	1	1	3	3	3	4	6	7	9	10	14	15	19	20	24	26	38	42	55	61	
1			1	1	1	1	1	2	3	3	4	5	7	7	10	11	14	15	18	20	29	31	42	45	
0					1	1	1	2	2	2	4	4	6	6	9	9	12	13	16	16	25	26	37	38	
2/0					1	1	1	1	1	2	3	3	5	5	8	8	11	11	14	14	22	22	32	32	
3/0					1	1	1	1	1	1	3	3	4	4	7	7	9	9	12	12	19	19	27	27	
4/0					1	1	1	1	1	1	2	2	3	3	6	6	8	8	10	10	16	16	23	23	
250					1	1	1	1	1	1	1	2	3	3	5	5	6	6	8	8	13	13	19	19	
300					1	1	1	1	1	1	1	1	3	3	4	4	5	5	7	7	11	11	16	16	
350					1	1	1	1	1	1	1	1	1	2	3	3	5	5	6	6	10	10	15	15	
400							1	1	1	1	1	1	1	2	3	3	4	4	6	6	9	9	13	13	
500							1	1	1	1	1	1	1	1	3	3	4	4	5	5	8	8	11	11	
600											1	1	1	1	1	2	3	3	4	4	6	6	9	9	
700											1	1	1	1	1	2	3	3	3	3	6	6	8	8	
750											1	1	1	1	1	1	3	3	3	3	5	5	8	8	
800											1	1	1	1	1	1	2	2	3	3	5	5	7	7	
900											1	1	1	1	1	1	1	2	3	3	4	4	7	7	
1000											1	1	1	1	1	1	1	1	3	3	4	4	6	6	
1250													1	1	1	1	1	1	1	2	3	3	5	5	
1500															1	1	1	1	1	1	3	3	4	4	
1750															1	1	1	1	1	1	2	2	4	4	
2000															1	1	1	1	1	1	1	1	3	3	

(a) Col. A = Type RFH-2, RH, RHH, RHW, THW, TW, XHHW (AWG14-6), FEPB (AWG6-2)
Col. B = FEP, THHN, THWN, TFN, PF, PGF, XHHW, (AWG4-2000MCM), FEPB (AWG14-8)
(b) Any combination of these wires are not to exceed 25 percent of the cross section of the conduit for the fitting in which fill may be used.

Source: UL 886 Table 35.1 Revised April 29, 1994

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Thomas & Betts Corporation
Memphis, Tennessee
Website: www.TNB.com