

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

The National Electrical Code® (NEC) in Article 501, Section 501-5, Class I, Divisions 1 and 2, requires that seals be installed in specific places. This is to minimize the passage of gases and vapors and prevent the passage of flames through the conduit from one portion of the electrical installation to another portion.

While not a Code requirement, it is considered good practice to sectionalize long conduit runs by inserting seals not more than 50 to 100 feet apart, depending on the conduit size, to minimize the effects of "pressure piling".

The Code in Section 502-5 requires seals in Class II locations under certain conditions. **Robroy Industries** sealing fittings can be used to meet this requirement.

Conduit seals are not intended to prevent the passage of liquids, gases or vapors at a continuous pressure differential across the seal. Even at differences in pressure across the seal equivalent to a few inches of water, there may be a slow passage of gas or vapor through a seal and through the conductors passing through the seal.

Conductors sealed in the compound should be approved thermoplastic or rubber insulated type.

CAUTION

Refer to Table on back to determine the maximum number and size of conductors allowed in a seal.

Only experienced, careful installers should be entrusted with making the dam, mixing and pouring the compound. Improperly made seals are worthless. Mixing vessel must be cleaned thoroughly before mixing new compound.

CAUTION:

Splices are not permitted in sealing fittings under National Electric Code Article 501-5 (c) (4).

DAM PREPARATION

Construct dams, per instructions below. Please note the required amount of Chico X fiber for 1/2" through 2" hub size outlet bodies is also included.

1. Make dam in hub(s) of sealing fitting using Chico X in following manner:

NOTE:

Vertical fittings need dam only in bottom hub.
Horizontal fittings need dam in both hubs.

- a. Using a hardwood stick, force conductors towards filling opening. **DO NOT USE METAL TOOLS.**
- b. Pack Chico X Fiber into conduit hub(s) behind conductors.

- c. Push conductors away from filling opening and force them apart.
- d. Pack fiber between AND around conductors in hub(s).

NOTE:

If conductors are stiff insert temporary wooden wedges between conductors to aid in holding them apart. It is important that conductors be separated from each other so sealing compound will surround each conductor.

- e. Pack fiber into hub(s) in front of conductors. Completed dams should be flush with conduit bushing.

CAUTION:

Don't leave shreds of fiber sticking to walls or conductors. Such shreds form channels that allow leakage.

2. Mix and pour **Robroy Industries** Chico sealing compound in accordance with instructions furnished with compound.
Amount of new Chico X or one* hub of **Robroy Industries** sealing fitting:

Hub Size (inches)	Chico X Required (ounces)
1/2	1/32
3/4	1/16
1	1/8
1 1/4	1/4
1 1/2	1/2
2	1

POURING SEALS

- Remove plug from sealing hub on the GUA sealing cover.
- Tighten GUA sealing cover until sealing hub points vertically up.
- This should be done whether pouring a horizontal or vertical seal.
- Pour Chico A compound into fitting immediately after mixing. Fill GUA outlet box until Chico A compound reaches the lowest edge of the threads in the sealing hub. Replace the plug in the sealing hub of the GUA sealing cover.

CAUTION

Sealing compound to be mixed **ONLY** at temperatures above 40°F/4°C and **ONLY** poured into fittings that have been brought to a temperature above 40°F/4°C. Seals must **NOT** be exposed to temperatures below 40°F/4°C for at least 72 hours, compound **MUST** be allowed 72 hours to cure to full strength before energizing system.

MAXIMUM NUMBER OF CONDUCTORS THAT CAN BE SEALED IN A ROBROY INDUSTRIES GUA SEALING FITTING

SIZE AWG OR KCMil	1/2" CONDUIT		3/4" CONDUIT		1" CONDUIT		1 1/4" CONDUIT		1 1/2" CONDUIT		2" CONDUIT	
	A	B	A	B	A	B	A	B	A	B	A	B
18	13	19	24	34	39	55	67	95	92	131	152	216
16	11	15	19	27	31	43	54	75	74	103	123	170
14	9	14	15	24	25	39	41	68	60	93	90	154
12	7	10	12	18	20	29	34	50	47	69	76	115
10	5	7	9	11	15	18	27	32	36	44	60	73
8	3	3	4	6	7	9	13	16	17	22	28	36
6	1	2	2	4	4	7	7	11	10	16	16	26
4	1	1	2	2	3	4	5	7	7	9	12	16
3	1	1	2	2	3	3	5	6	6	8	11	13
2	1	1	1	2	2	3	4	5	5	7	9	11
1	1	1	1	1	2	2	3	4	4	5	7	8
1/0	1	1	1	1	1	2	2	2	3	4	6	7
2/0	1	1	1	1	1	1	2	3	3	4	5	6
3/0	1	1	1	1	1	1	2	2	2	3	4	5
4/0	1	1	1	1	1	1	2	1	2	2	3	4
250	1	1	1	1	1	1	1	1	2	2	3	3
300							1	1	1	1	2	3
350							1	1	1	1	1	3
400							1	1	1	1	1	2
500							1	1	1	1	2	1
600							1	1	1	1	1	1
700							1	1	1	1	1	1
750							1	1	1	1	1	1
800							1	1	1	1	1	1
900												
1000												
1250												
1500												
1750												
2000												

Col.B = FEP, THHN, THWN, TFM, PF, PGF
XHHW(AWG4 - 2000 MCM)
FEPB(AWG14 - 8)

Col.A = Types RFH-2, RH, RHH, RHW, THW, TW
XHHW(AWG 14 - 6)
FEPB(AWG 6 - 2)



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Robroy Industries
1100 US Hwy 271 South
Gilmer, TX 75644 •
U.S.A.

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