



CBR

Cable Breakouts

General Instructions

Suggested Installation Equipment (not supplied with kit)

- Cable preparation tools
- Raychem P42 cable preparation kit or cable manufacturer approved solvent
- Clean, lint-free cloths
- Raychem recommended torch or heat gun

Recommended Raychem Torches and Heat Gun

Install heat-shrinkable cable accessories with a "clean burning" torch, i.e., a propane torch that does not deposit conductive contaminants on the product.

Clean burning torches include the Raychem FH-2609, FH-2629 (uses refillable propane cylinders) and FH-2616A1 (uses disposable cylinder).

Recommended hot air gun is Raychem Model CB-5000 Thermogun Model 750 (115V).

Safety Instructions

Warning: When installing electrical power system accessories, failure to follow applicable personal safety requirements and written installation instructions could result in fire or explosion and serious or fatal injuries.

To avoid risk of accidental fire or explosion when using gas torches, always check all connections for leaks before igniting the torch and follow the torch manufacturer's safety instructions.

As Raychem has no control over field conditions which influence product installation, it is understood that the user must take this into account and apply his own experience and expertise when installing product.

To minimize any effect of fumes produced during installation, always provide good ventilation of confined work spaces.

Adjusting the Torch

Adjust regulator and torch as required to provide an overall 12- inch bushy flame. The FH-2629 will be all blue, the other

torches will have a 3- to 4-inch yellow tip. Use the yellow tip for shrinking.

Regulator Pressure

FH-2616A1	Full pressure
FH-2609	5 psig
FH-2629	15 psig

Cleaning the Cable

Use an approved solvent, such as the one supplied in the P63 Cable Prep Kit, to clean the cable. Be sure to follow the manufacturer's instructions. Failure to follow these instructions could lead to product failure.

Some newer solvents do not evaporate quickly and need to be removed with a clean, lint-free cloth. Failure to do so could change the volume resistivity of the substrate or leave a residue on the surface.

Please follow the manufacturer's instructions carefully.

General Shrinking Instructions

- Apply outer 3- to 4-inch tip of the flame to heat-shrinkable material with a rapid brushing motion.
- Keep flame moving to avoid scorching.
- Unless otherwise instructed, start shrinking tube at center, working flame around all sides of the tube to apply uniform heat.

To determine if a tube has completely recovered, look for the following, especially on the back and underside of the tube:

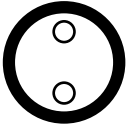
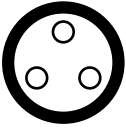
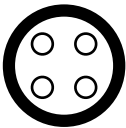
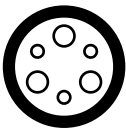
1. Uniform wall thickness.
2. Conformance to substrate.
3. No flat spots or chill marks.
4. Visible sealant flow if the tube is coated.

Note: When installing multiple tubes, make sure that the surface of the last tube is still warm before positioning and shrinking the next tube. If installed tube has cooled, re-heat the entire surface.

1. Product selection.

Check kit selection with cable diameter dimensions in Table 1.

Table 1

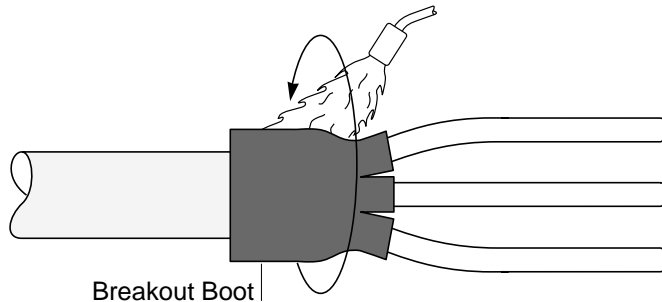
Cross Section	Kit	Body Use Range Min-Max	Legs Use Range Min-Max
	CBR-2-1-A	0.35-1.00" (9-25mm)	0.15-0.53" (4-13mm)
	CBR-2-2-A	1.25-1.70" (32-43mm)	0.30-0.75" (8-19mm)
	CBR-2-3-A	1.65-3.00" (42-75mm)	0.65-1.40" (17-36mm)
	CBR-3-1-A	0.50-1.35" (13-34mm)	0.20-0.55" (5-14mm)
	CBR-3-2-A	0.85-2.20" (22-56mm)	0.35-0.90" (9-23mm)
	CBR-3-3-A	1.10-2.90" (28-74mm)	0.50-1.25" (13-32mm)
	CBR-3-4-A	2.35-5.65" (60-144mm)	1.20-2.10" (30-53mm)
	CBR-4-1-A	0.70-1.25" (18-32mm)	0.15-0.45" (4-11mm)
	CBR-4-2-A	1.00-2.10" (25-53mm)	0.35-0.90" (9-23mm)
	CBR-4-3-A	1.20-3.50" (30-89mm)	0.55-1.40" (14-36mm)
	CBR-4-4-A	2.35-6.05" (60-154mm)	0.90-1.50" (23-38mm)
	CBR-6-1-A	1.45-3.85" (37-98mm)	0.60-1.50" (15-38mm)
	CBR-6-2-A	2.65-5.30" (67-135mm)	0.30-0.75" (8-19mm)
			0.40-0.95" (10-24mm)

Warning: De-energize circuit(s) before proceeding with installation.

2. Position boot; shrink in place.

Position boot tightly into crotch area.

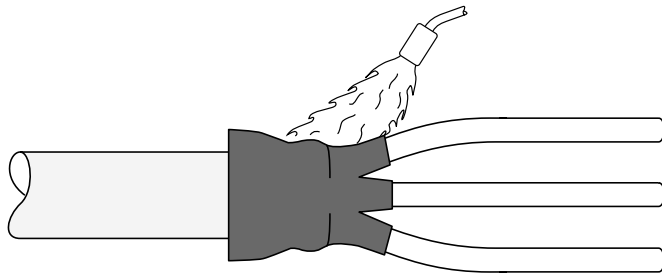
Begin shrinking at center of boot body, work torch with a smooth brushing motion around all sides of the boot.



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3. Complete shrinking.

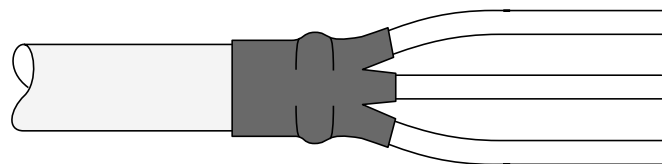
Continue to the boot body and boot fingers as the cap shrinks and conforms to the cable contour. Separate individual conductors and apply heat between them to provide a smooth crotch.



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Properly installed boot will be smooth and conform to cables or other substrate. Adhesive will be visible at ends.

Installation is complete.



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