

# Use of Sealant Joint Backing Materials Technical Bulletin # 106

### Why use backer rod?

- ➢ Control the sealant depth.
- Prevent three-sided adhesion.
- > Allow for thorough contact of sealant to joint walls after tooling.

#### **Three Basic Types**

Generic Type	Tradenames
Closed Cell	Green Rod
Open Cell	Denver Foam
Hybrid – Open Cell with polyolefin skin	Soft Rod

## Closed Cell (Green Rod)

#### Advantage:

	$\triangleright$	Impervious to moisture/air transmission
	$\triangleright$	Does not retain water
	$\triangleright$	Ideal for multi-component sealants
Disadvantage:		
	≻	Difficult to install / not compressible
		No cure from backside of sealant/joint. Not always suitable for single component sealants.
Applications:		
		Vertical and horizontal joints with one or two component sealants. Approved for use in EIFS applications.
<u>Open Cell (De</u>	enver F	loam)
Advantage:		
	≻	Easy to install / highly compressible
	$\triangleright$	Allows air to pass through backer rod for faster cure with one-part sealants.
Disadvantage:		
	$\triangleright$	Behaves like a sponge when introduced to water/moisture
	$\succ$	Water/moisture introduction can accelerate degradation of sealant (reversion)

#### **Applications:**

$\succ$	Vertical joints utilizing one-component sealants when cure speed is critical.
$\succ$	Double caulk beads in vertical joints for curing of initial (internal) caulk bead
$\succ$	Not for use in horizontal traffic joints or EIFS applications.



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## Hybrid – Open Cell with polyolefin skin (Soft Rod)

Advantage:

	$\triangleright$	Exhibits advantages of closed cell backer rod
	$\triangleright$	Highly compressible
	$\triangleright$	Easy installation
Disadvantage:		
-		Single component sealants will only cure from exposed sealant surface and not from back side against backer rod.
Applications:		
	>	Recommended for all sealant applications with the exception of applications requiring rapid curing from backside.

### Helpful Hints:

- Install backer rod before primer application to avoid contamination of primer or joint wall prior to sealant application.
- When applying primer while backer rod is installed be careful not to saturate backer rod with excessive primer. This may compromise the cure of the installed sealant.
- Bond Breaker Tape may be used in joints not deep enough to accommodate a backer rod.
- Off-gassing in backer rod occurs occasionally in exterior applications when the backer rod has been punctured or cut and is exposed to rising temperatures which cause the gases to expand, escape and "bubble" the existing sealant. To avoid this situation the backer rod and sealant should be installed at a point when temperatures began to fall. This can be accomplished by completing installation in the late afternoon or evening. Simply cutting the backer rod and letting it sit will not necessarily exclude the incidence of off gassing.