



# EZ Angle®

## FRP Concrete Embedment Angle For FRP Gratings

### Makes Corrosion-prone Steel Embed Angle Frames for Grating Obsolete

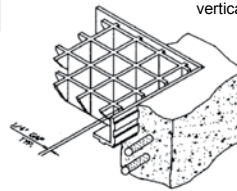
EZ Angle®, a fiberglass reinforced plastic (FRP) embedment angle from Fibergrate Composite Structures Inc. is corrosion resistant, rugged and lightweight. Manufactured from slate gray vinyl ester, fire-retardant resin, EZ Angle embedment angle is precision designed for solid seating of 1", 1-1/2", and 2" deep gratings.

Chemically resistant to the widest variety of corrosive atmospheres to which industrial gratings are exposed, EZ Angle provides a secure and durable seat for grating over concrete trenches and pits. Fibergrate's patented design eliminates the pullout factor experienced with unribbed fiberglass embedment angle and anchor clips. EZ Angle also saves repeated costly replacement of steel frames in corrosive environments.

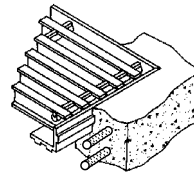
Another advantage of EZ Angle embedment angle is the relative ease of installation into concrete. Less work is required to vibrate the concrete around EZ Angle embedment ribs than with the more traditional anchored "Y" shaped embedment angle making it easier to cast into concrete. EZ Angles do not have the problems with voids that the "Y" angles are prone to. Also, rebar interference is not a problem with EZ Angle's unique design. Contractors familiar with both the traditional "Y" embed and EZ Angle insist on EZ Angle for future projects!

EZ Angle is stocked in 20' lengths for immediate shipment. Once in the field, the angle is easily cut to length with a circular or hack saw. (Remember to always seal all cut edges of FRP products.)

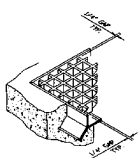
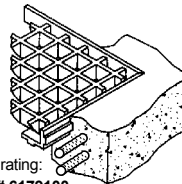
2" grating: PN# 6179000  
Install 2" side vertical



1-1/2" grating: PN# 6179000  
Install 1-1/2" side vertical



1" grating:  
PN# 6179100  
Install 1" side vertical



For applications where the traditional design is mandated, Fibergrate also offers a corrosion-resistant traditional anchored "Y" shaped embedment angle.

1" - PN 6179800    1-1/2" - PN 6179900  
2" - PN 6180000

# Fibergrate

Composite Structures

*High Performance Composite Solutions*



## Design Information

### LEGEND

GW	Grating Width
TW	Trench Width
BS	Bearing Surface
CS	Clearance Space

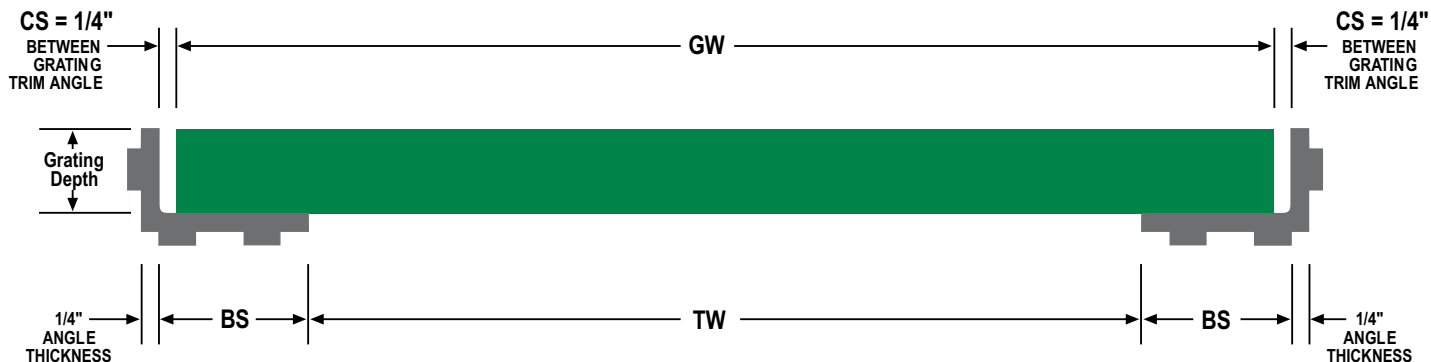
Noting the dimensional details on the diagram below, grating width should be cut according to this formula\*:

$$GW = TW + (2 \times BS) - 0.5 \quad (0.5 \text{ reflects } 1/4" \text{ clearance space on each side})$$

Example: If trench is 15" wide, grating should be cut 18-1/2" wide when using 1-1/2" grating (BS = 2" see chart below)

$$GW = 15" + (2 \times 2") - 0.5 \quad GW = 18-1/2"$$

\*This formula applies only to Fibergrate's EZ Angle embedment angle



### Common Grating Width Cuts

Grating Depth	Trench Width (TW) - inches														
	4-1/2	6	7-1/2	9	10-1/2	12	13-1/2	15	16-1/2	18	19-1/2	21	24	27	30
Grating Width (GW) - inches															
1\" (1-1/2\" BS)	7	8-1/2	10	11-1/2	13	14-1/2	16	17-1/2	19	20-1/2	22	23-1/2	26-1/2	29-1/2	32-1/2
1-1/2\" (2\" BS)	8	9-1/2	11	12-1/2	14	15-1/2	17	18-1/2	20	21-1/2	23	24-1/2	27-1/2	30-1/2	33-1/2
2\" (1-1/2\" BS)	7	8-1/2	10	11-1/2	13	14-1/2	16	17-1/2	19	20-1/2	22	23-1/2	26-1/2	29-1/2	32-1/2

## Installation of EZ Angle in a Concrete Trench

EZ Angle is designed to be an easy solution for trenches requiring grating. In five easy steps, you can have the perfect fit for your grating. (View animated installation instructions in our resource center at [www.fibergrate.com](http://www.fibergrate.com))

- STEP 1:** Securely attach a wooden nailer to the trench form on the side where grating will fit into the EZ Angle.
- STEP 2:** Attach EZ Angle to the wooden nailer using small finish nails (predrill holes in EZ Angle to facilitate process) at two- to three-foot intervals. Make certain that the top of the vertical leg of the EZ Angle is flush with the top surface of the nailer.
- STEP 3:** Pour concrete as normal. Limited vibration is needed to obtain complete fillout around the EZ Angle ribs with the concrete.
- STEP 4:** Adequate curing time before removing the trench form is important to insure maximum strength of trench. Once the concrete has cured, remove the trench form and wooden nailer.
- STEP 5:** Clip or grind finishing nails flush to surface of EZ Angle and seal holes with a sealing kit.

