

Technical Bulletin: All Weather J51 AW

Chemical anchoring can be challenging at certain times of the year. Winter brings cold temperatures and springtime brings a lot of wet weather. The All Weather J51 AW epoxy anchoring adhesive offers excellent performance in both situations as it can cure at temperatures as low as -15°F (-26°C) and it can be installed in damp or water filled holes. In accord with the ACI 318-11 Structural Concrete Building Code, adhesive anchors “should be installed in concrete having a minimum age of 21 days at the time of anchor installation”.

Unique benefits of the All Weather J51 AW

- Meets ASTM C-881 and AASHTO M-235 Types I, II, IV, V, Class A, B, C, Grade 3 (with exception of gel time).
- 100% solids
- VOC compliant “0” g/L
- Available in 8.5 oz. (275 ml) and 28 oz. (825 ml) cartridges

Applications in Cold Weather

- Store All Weather J51 AW @ 40°-95°F (5°-35°C)
- Precondition the All Weather J51 AW to 65°-85°F (18°-29°C) prior to use
- All surfaces in contact with the All Weather J51 AW must be free of frost and ice
- Pneumatic guns are recommended during temperatures below 40°F (5°C) and for larger projects where high production is required.

Applications in Water Filled Holes

1. Concrete must be a minimum of 21 days old.
2. Drill or core the hole.
3. Flush - Insert a suitably sized piece of tubing and Flush the hole with water from the bottom up until the water runs clear.

4. Clean – Scrub hole with a stainless steel wire brush (available thru Dayton Superior) to remove dust and debris.
5. Repeat steps 2 and 3 to ensure all loose matter or mud is expelled.
6. Trial fit the cartridge mixing nozzle extension – Ensure the extension extends to the bottom of the hole.
7. Discharge a small amount of epoxy outside the hole - Ensure complete mixing is achieved shown by uniform gray color.
8. Overfill the hole with epoxy from the bottom up in one continuous lift - Withdraw the mixing nozzle extension just below the rising surface of the epoxy. Do not allow water filled voids to occur within the epoxy mass.
9. Immediately insert the anchor and rotate to ensure that all embedded surfaces are covered.
10. Position or restrain the anchor in its final position immediately after insertion.
11. Do not disturb or vibrate the anchor until set has occurred, movement can detrimentally affect the pullout strength of the connection.
12. All surfaces that All Weather J51 AW will be installed on must be free of frost and ice.

Applications in concrete anchoring

1. Concrete must be a minimum of 21 days old.
2. Drill or core the hole
3. Flush - Insert a suitably sized piece of tubing and Flush the hole with water from the bottom up until the water runs clear
4. Clean – Scrub hole with a stainless steel wire brush (available thru Dayton Superior) to remove dust and debris
5. Repeat steps 2 and 3 to ensure all loose matter or mud is expelled.
6. Trial fit the cartridge mixing nozzle extension – Ensure the extension extends to the bottom of the hole.

7. Discharge a small amount of epoxy outside the hole - Ensure complete mixing is achieved shown by uniform gray color.
8. Fill the hole $\frac{1}{2}$ - $\frac{2}{3}$ from the bottom up in one continuous lift - Withdraw the mixing nozzle extension just below the rising surface of the epoxy.
9. Immediately insert the anchor and rotate to ensure that all embedded surfaces are covered.
10. Position or restrain the anchor in its final position immediately after insertion.
11. Do not disturb or vibrate the anchor until set has occurred, movement can detrimentally affect the pullout strength of the connection.
12. All surfaces that All Weather J51 AW will be installed on must be free of frost and ice.

Tools/Equipment Accessories

Stainless steel wire brushes

Product number	Thread Rod Diameter	Rebar	Drill Bit Diameter	Brush Diameter	Length
141856	3/8"	#3	7/16"	9/16"	8"
141857	1/2"	#4	9/16"	11/16"	8"
141854	5/8"	#5	3/4"	7/8"	8"
141855	3/4"	#6	7/8"	1"	12"
141879	7/8"	#7	1"	1-1/8"	12"
141858	1"	#8	1-1/8"	1-1/4"	12"
141878	1-1/4"	#9	1-3/8"	1-1/2"	12"
141859		#10	1-1/2"	1-5/8"	12"

Caulking Guns

141680 T825 Manual 10:1 Gun (28 OZ.)

140953 AT825 Pneumatic 10:1 Gun (28 OZ.)