



EJ-500

EPDM Expansion Joint System

DESCRIPTION

The EJ-500 EPDM expansion joint system is used for waterproofing expansion joints in structures, such as commercial and industrial buildings, parking garages, tunnels, etc. The EJ-500 is installed with the Carlisle CCW-500R Reinforced Hot Applied Liquid Membrane System. EJ-500 is supplied directly to the job site in a roll with detail work completed and seamed together by a proprietary vulcanizing process, which results in monolithic and elastic seamed joints. Seaming can also be done on site if required. EJ-500 is a flat profile elastic material manufactured from a saturated elastomer. The EJ-500 EPDM expansion joint system comes in two sizes, the EJ-500/20 and EJ-500/40, designed to accommodate specific horizontal building movements of 3/4" and 1-3/4" respectively.



TYPICAL USES

The EJ-500 EPDM expansion joint system is designed to be used for:

- Plaza Deck Expansion Joints
- Parking Garage Expansion Joints
- Protected Roof Membrane Expansion Joints
- Tunnel Expansion Joints
- Vertical Wall Expansion Joints
- Bridge Expansion Joints

MATERIAL SELECTION

The EJ-500 EPDM expansion joint system is designed to accommodate 3 way building movements.

Movement	EJ-500/20	EJ-500/40
Horizontal	± 3/4"	± 1-3/4"
Vertical	± 5/8"	± 3/4"
Shear	± 3/8"	± 3/4"

TECHNICAL DATA

Property	Test Method	Results
Hardness Shore A	ASTM D-2240	45 ± 5
Lap Joint Strength	ASTM D-816	Same as base material
Low Temperature Flex	ASTM D-746	- 70 °F
Ultimate Elongation	ASTM D-412	500 %
Tear Resistance	ASTM D-624 Die C	220 lbf/in
Puncture Test	CGSB 37.56 M96	10 lbs min.
UV Exposure 2000 hours	ASTM G-53	No Cracks or Crazing
Chemical Resistance to:		
Acids		No effect
Alkalis		No effect
Polar Solvents		No effect
Salt Solutions		No effect

EJ-500 PACKAGING DATA

Property	EJ-500/20	EJ-500/40
Thickness	0.086"	0.086"
Roll Width	10-1/2"	13-1/4"
Expansion Joint Gap		
Gauge Width	1-1/2"	2-1/4"
Roll Length	Custom	Custom
Weight	0.45 lb/ft	0.60 lb/ft
Color	Red	Red

STORAGE

Store rolls on end, on original pallets or elevated platform. Protect from weather or store in an enclosed area. Do not allow the EJ-500 EPDM expansion joint fleece to get wet.

SURFACE PREPARATION

Refer to Carlisle's manufacturer's guide specifications for detailed waterproof membrane application information. All surfaces must be dry and clean of debris.

APPLICATION

Identify the start installation location from the plan accompanying the roll of EJ-500 EPDM expansion joint material. Roll out the EJ-500 and allow it to relax prior to application. Make sure that the building expansion joint is clean and free of debris and has been packed with compressible batt insulation. Align the center line of the expansion joint gap with the center line of the EJ-500 EPDM expansion joint material, and verify the EJ-500 conformance to site details prior to the membrane application.

CCW-500 Reinforced Hot Applied Liquid Membrane:

Melt the Carlisle CCW-500 in a double walled kettle and bring it to a temperature of 380° F. Apply the first application of the CCW-500 at minimum thickness of 90 mils. Immediately following the application of CCW-500 embed the EJ-500 EPDM expansion joint material, making sure that the bottom polyester fleece is in full contact with the hot liquid asphalt. Press the EJ-500 material into the hot CCW-500 material. The center of the EJ-500 EPDM expansion joint material must be aligned with the center line of the expansion joint gap. Lay the EJ-500 EPDM expansion joint material only in lengths of 10 feet or less to allow for contact with hot, liquid CCW-500 material. Do not lay the EJ-500 in cold CCW-500 material.

Spread an even coat of 90 mils of CCW-500 on the top surface of the EJ-500 EPDM expansion joint ensuring the top white polyester fleece is completely covered. Embed the CCW-500 Reinforcing Fabric overlapping the edge of the EJ-500 2"-3", ensuring full contact. Apply a second application of CCW-500 on top of the CCW-500 Reinforcing Fabric at a minimum of 125 mils thickness.

Protection Course: Install CCW MiraDRAIN Drainage Composite or CCW Protection Board-H Protection Course over the EJ-500 EPDM expansion joint material.

LIMITED WARRANTY

CARLISLE COATINGS & WATERPROOFING INCORPORATED (CARLISLE) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any CARLISLE materials prove to contain manufacturing defects that substantially effect their performance, CARLISLE will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by CARLISLE with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. CARLISLE specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of CARLISLE's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the CARLISLE material in question.