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CARLISLE COATINGS & WATERPROOFING

WATERPROOFING

EJ-500 Expansion Joint System

Description

The EJ-500 expansion joint system is used for waterproofing expansion joints in structures, such as commercial and industrial buildings, plaza decks, parking garages, tunnels, vertical walls and bridges. Installed with the following membrane systems: CCW500R; CCW-525;CCW-LiquiSEAL; MiraPLY with SeamLOCKTechnology; Barritech VP; NP/LT; Barriseal/ Barricoat. EJ-500 is supplied directly to the jobsite 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 expansion joint system comes in four sizes, the EJ-500/20, EJ-500/40 and EJ-500/100 and also EJ-500/240, designed to accommodate specific horizontal building movements of plus or minus 1", 2", 4", and 10" respectively.

The EJ-500 expansion joint system is designed to accommodate threeway building movements.

Movement	EJ-500/20	EJ-500/40	EJ-500/100	EJ-500/240
Horizontal	+/- 1"	+/- 2"	+/- 4"	+/- 10"
Vertical	+/- 5/8"	+/- 3/4"	+/- 2"	+/- 4"
Shear	+/- 3/8"	+/- 3/4"	+/- 2"	+/- 4"

Installation

Identify the start installation location from the plan accompanying the roll of EJ-500 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 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 350°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 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 expansion joint material must be aligned with the center line of the expansion joint gap. Lay the EJ-500 expansion joint material only in lengths of 10' or less to allow for contact with hot, liquid CCW-500 material. Do not lay the EJ-500 into cold CCW-500 material.

Spread an even coat of 90 mils of CCW-500 on the top surface of the EJ-500 expansion joint, ensuring the white polyester fleece is completely covered. Embed the CCW-500 Reinforcing Fabric overlapping the edge of the EJ-500 by 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 expansion joint material.

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 expansion joint fleece to get wet.

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900 Hensley Lane | Wylie, TX 75098 | 800.527.7092 | **www.carlisleccw.com**

WATERPROOFING

EJ-500 Expansion Joint System

Packaging

Property	EJ-500/20	EJ-500/40	EJ-500/100	EJ-500/240
Thickness	0.087"	0.087"	0.118"	0.118"
Roll Width	10-½"	13-½"	16"	22"
Expansion Joint Gland Width	1-½"	2-1¼"	4-¾"	10"
Roll Length	Custom	Custom	Custom	Custom
Weight	0.45 lb/ft	0.55 lb/ft	0.77 lb/ft	1.14 lb/ft
Color	Red	Blue	Blue	Red

EJ-500/20 and EJ-500/40 Typical Properties

Property	Method	Results
Hardness Shore A	ASTM D2240	45 +/- 5
Lap Joint Strength	ASTM D816	Same as base material
Low Temperature Flex	ASTM D746	-70°F (-57°C)
Elongation	ASTM D412	500%
Tear Resistance	ASTM D624, Die C	220 lbs/in
Puncture Test	CGSB 37.56 M96	10 lbs min
UV Exposure 2,000 hrs	ASTM G53	No cracks or crazing

EJ-500/100 and EJ-500/240 Typical Properties

Property	Method	Results
Hardness Shore A	ASTM D2240	45 +/- 5
Lap Joint Strength	ASTM D816	Same as base material
Low Temperature Flex	ASTM D746	-70°F (-57°C)
Elongation	ASTM D412	500%
Tear Resistance	ASTM D624, Die C	250 lbs/in
Puncture Test	CGSB 37.56 M96	15 lbs min
UV Exposure 5,000 hours	ASTM G53	No cracks or crazing

Chemical Resistance

Chemical	Effect
Acids	No effect
Alkalis	No effect
Polar Solvents	No effect
Salt solutions	No effect

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 affect 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.

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