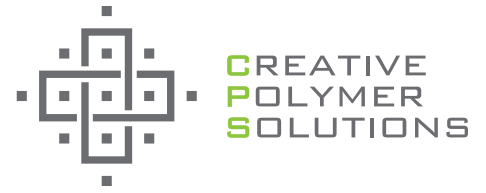


TECHNICAL DATA SHEET

AirLok™ 45

Material Specification Criteria | Project Submittal Data



PRODUCT TYPE

Creative Polymer Solutions, LLC. AirLok™ 45 is a two component, 1:1 by volume spray applied polyurethane foam. AirLok 45 is a high yield, no mix spray applied insulation foam, which contain Zero ozone depleting blowing agents. AirLok™ 45 is designed to provide significant control of air infiltration along with a high R-value per inch.

RECOMMENDED USES

AirLok™ 45 is an insulation system designed for use in residential, commercial and industrial applications. Typical areas where spray polyurethane foam is applied are: exterior walls, vented and un-vented attic assemblies, between floors, etc. Suitable for application to most common construction materials including wood, masonry, concrete and metal. Multiple layers can be applied to reach the desired thickness and R-Value.

PROPERTIES	TEST METHOD	VALUES
R-VALUE	ASTM C518	3.80 @ 1"
CORE DENSITY	ASTM D1622	0.40 pcf
DIMENSIONAL STABILITY	ASTM D2126	< 10%
TENSILE STRENGTH	ASTM D1623	4.2 psi
OPEN CELL CONTENT	ASTM D1940	> 98%
AIR IMPERMEABLE	ASTM E283	< 0.02 (L/s-m2)
RESIN APPEARANCE		Clear Amber
REACTIVITY PROFILE @ 77°F		Initiation: 2-3"
REACTIVITY PROFILE @ 77°F		Rise: 9-11"
DENSITY (LB./GAL) US		9.26 lbs.
VISCOSITY @ 77°F: RESIN (B) COMPONENT		320 cps

EQUIPMENT SETTINGS		
PRE-HEATERS: TEMPERATURE ISO (A) COMPONENT	135°F	
PRE-HEATER TEMPERATURE RESIN (B) COMPONENT	135°F	
HOSE HEAT TEMPERATURE	135°F	
MIXING RATIO	1:1 by Volume	
FLUID PRESSURE	1400-1600 psi Dynamic	

APPLICATION PARAMETERS		
STORAGE TEMPERATURE	50°F - 80°F	
AMBIENT AIR TEMPERATURE	40°F - 180°F	
SUBSTRATE TEMPERATURE	50°F - 120°F	
MOISTURE CONTENT OF SUBSTRATE	Less than 20%	
MAXIMUM LIFT PER PASS	Not to exceed 6"	
RECOMMEND MIX CHAMBER SIZE	10-15 lbs./min. (i.e. Graco AR4242)	

MIXING INSTRUCTIONS

Resin (B Side): Mix thoroughly for 20-30 minutes prior to use for higher yield results.

*Mixing is not a requirement of Equipment Settings or Application Parameters.

EQUIPMENT AND APPLICATION PARAMETERS

The values represented in the Equipment and Application Parameter Chart provides initial optimum settings. Actual operating ranges will vary as ambient air; humidity, moisture and substrate temperatures vary. Extreme conditions will affect the yield, adhesion and cured physical properties of the foam. Applicator must make adjustments as conditions vary.

FLAMMABILITY CHARACTERISTICS

IAPMO-ES REPORT NO.: 554
IAPMO-ES AC377, APPENDIX X: Pass
NFPA 286: Pass
MAXIMUM THICKNESS TESTED:

Tested Only - Not a Limit on application thickness

Wall Cavities: 10 Inches

Ceiling Cavities in Attics and Crawl Spaces: 14 Inches

FLAMMABILITY: ASTM E84: Class A@4"
FLAME SPREAD: ASTM E84: Class A<25
SMOKE DEVELOPMENT: ASTM E84: Class A<350

APPROVED INTUMESCENT COATINGS

THERMAL BARRIER: The following intumescent coatings when installed per manufacturer specifications are approved as thermal barrier alternatives for AirLok™ 45 by the International Building Code (IBC) section 2603.4 or International Residential Code (IRC) section R316.4 when all of the following apply:

ALTERNATIVE THERMAL BARRIER ASSEMBLIES

FIRE-PROTECTIVE COATING/COVERING

TYPE: DC315
MIN. THICKNESS (mils): 18 WFT (12 DFT)

MAX. SPF THICKNESS (in.)

WALLS/VERTICAL: 10
CEILINGS/OVERHEAD: 12

a. AirLok™ 45 shall not exceed 10 inches (254 mm) on walls and other vertical surfaces and 12 inches (305 mm) on ceilings and other horizontal and overhead surfaces.

b. AirLok™ 45 is coated with a minimum 18 mils (0.46 mm) wet mil thickness: 12 mils (0.3 mm) dry film thickness. Each coating should be applied in accordance with the coating manufacturer's instructions.

IGNITION BARRIER: AirLok™ 45 meets the requirements of ICC-ES AC 377 Appendix X for use in attics and crawlspace without a prescriptive ignition barrier when covered with one of the following approved intumescent coatings:

ALTERNATIVE IGNITION BARRIER ASSEMBLIES

FIRE-PROTECTIVE COATING/COVERING

TYPE: DC315 FS-IB
MIN. THICKNESS (mils): 4 WFT(3DFT) 6 WFT (3DFT)
THEORETICAL APP. RATE: .25gal/100ft2 .38 gal/100ft2
MAX. SPF THICKNESS (in.)

WALLS/VERTICAL: 10 10
CEILINGS/OVERHEAD: 12 15

MANUFACTURED BY:

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