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Information Memo – 2021-01

To: NBRCA Members

From: MRGNB

Date: June 8, 2021

Delamination concerns with glass mat faced polyisocyanurate insulation panels used with

Re: hot asphalt applications

During the Quality Assurance Observation Firm meeting on October 27, 2020, a comment was presented about the potential for delamination of the face of glass mat faced polyisocyanurate insulation panels when using hot asphalt adhesive applications.

MRGNB completed a literature review of three insulation manufacturers: Atlas Roofing Corporation, IKO Industries Ltd., and Soprema Inc. The document search revealed that the temperature of the hot bitumen typically needs to be adjusted to below the specified EVT when used as adhesive for most, but not all, polyisocyanurate insulation products regardless of the insulation facer.

Additionally, MRGNB discussed some specific products with a Soprema Representative to confirm the literature information and further discuss the differences in hot bitumen application temperature requirements for some of their high density polyisocyanurate insulation products. We were advised that, generally, the different requirements are due to differences in the manufacturing process and/or the physical characteristics of the products.

Except as noted in the table on the following page, the recommendations of all of the manufacturers are generally similar; hot bitumen used as adhesive in contact with polyisocyanurate insulation should be slightly below the bitumen EVT, in the order of 200°C (390°F).

It is imperative that the parties involved in the roofing design, installation and observation of roof system applications incorporating asphalt adhered polyisocyanurate insulation be aware of these requirements.

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The table below is a summary of the findings.

Hot Bitumen Application on Polyisocyanurate Insulation		
Supplier	Product	Maximum temperature for bitumen used as adhesive with polyisocyanurate insulation
IKO	All IKO Insulation products	Technical Bulletin – Part 5, Section 5.01.4 c): Max bitumen temperature 199°C (390°F)
Soprema	SOPRA-ISO	10°C below the EVT
	SOPRA-ISO PLUS	10°C below the EVT
	SOPRA-ISO PLUS HD	No hot bitumen applications permitted. (Due to the thickness of board (1/2"), curling is likely)
	SOPRA-ISO TAPERED	10°C below the EVT
	SOPRA-ISO PLUS SHIPLAP BOARD	10°C below the EVT
	2-1 SOPRASMART BOARD	No special requirement
	3-1 SOPRASMART ISO HD	No special requirement
Atlas	All AC Foam Insulation products	Technical Bulletin #4: Max. bitumen temp 390°F

END



