



USE OF BELOW-DECK SPRAY FOAM INSULATION WITH FIBERGLASS/ASPHALT SHINGLES*

What is spray foam insulation?

Spray foam insulation is a spray-applied material that can be used on the underside of roof decks as building insulation.

Why is spray foam insulation used?

Beginning with the 2006 version of the International Residential Code (IRC) and continuing with later versions, use of spray foam insulation has been recognized as a method of insulating a roof assembly when installed in accordance with requirements of the code and the manufacturer's application instructions.

Any concerns with using below-deck spray foam insulation?

Spray foam insulation may create an unvented attic. An improperly designed and constructed unvented attic may be subject to vapor condensation and moisture accumulation in the attic space which may penetrate into the habitable areas of the building and may cause mold and mildew. It may also lead to premature deterioration of insulation, wood and other roofing and construction materials.

Will use of below-deck spray foam insulation affect my fiberglass/asphalt shingles?

Spray-foam insulation applied to the underside of the roof deck will prevent free flow of air on the bottom side of the deck and the associated dissipation of heat that occur with a traditional vented attic construction. Lack of adequate ventilation immediately below the roof deck may lead to unacceptable deck movement and premature roofing system failure. Ensuring proper design and construction of unventilated spaces and appropriate management of moisture essential and are the responsibility of the building owner, design professional, and contractor.

What is TAMKO's recommendation for ventilation?

TAMKO recommends adequate attic ventilation that meets Federal Housing Administration (FHA) minimum standards of one square foot of net free ventilation area to each 150 square feet of space to be vented and provides for unobstructed air flow from soffit to ridge. This may be reduced to one square foot of ventilation area per 300 square feet if 2012, 2015, or 2018 International Residential Code (IRC) requirements associated with this reduction are followed.

Are there spray foam applications that maintain ventilation?

There are options to maintain free-flow ventilation on the underside of the roof deck from soffit to ridge when installing spray foam insulation. Installation of baffles between rafters before application of spray foam is one example. In these situations, follow TAMKO recommendations for minimum ventilation and ensure each cavity is ventilated.

But what about completely unventilated installations with spray foam insulation?

TAMKO acknowledges the growing desire for unvented attic constructions and recommends all code requirements and manufacturer's instructions be followed. Use of an experienced design professional is highly recommended.

What effect will use of below-deck spray foam insulation have on my limited warranty?

In situations in which spray foam is applied to the underside of the roof deck, the TAMKO *Fiberglass/Asphalt Shingle Limited Warranty and Arbitration Agreement* expressly states:

“Exclusions from Coverage: There are many reasons why roofs fail, including but not limited to the following matters, all of which are beyond TAMKO's control. TAMKO shall not be liable under any circumstances and shall have no obligation under this Limited Warranty or otherwise for:

1. Shingles that have been: (a) improperly applied, stored or handled; (b) installed without adequate ventilation; (c) not installed in strict accordance with application instructions printed on the wrapper and standard good roofing practices; or (d) installed over roof decks with polyurethane foam applied to the underside of the roof deck. “

See the *TAMKO Fiberglass/Asphalt Shingle Limited Warranty and Arbitration Agreement* for complete details.*

This document is not intended nor should it be construed to modify or alter the terms of the TAMKO Fiberglass/Asphalt Shingles Limited Warranty and Arbitration Agreement.

Additional information about TAMKO products is available at tamko.com.

* To obtain the current version of this Technical Notice and the most recent limited warranty, visit TAMKO's website at tamko.com. TAMKO reserves the right to update, remove, or otherwise modify any Technical Notice. If a previous Technical Notice currently is not listed at tamko.com then it is no longer valid and should not be referenced or relied upon for any reason.

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