



Common Questions for Roofing with Asphalt Shingles

DEVELOPMENT SERVICES DIVISION
Building Permits and Inspections
201-A W. Gray St. Norman OK 73069
Permits: (405) 366-5339

The below question and answer information is intended to assist with questions regarding roofing with asphalt shingles.

Question: Does the City of Norman require a permit for roofing work?

Answer: No, however work still has to comply with all adopted codes. Roofing contractors must be registered with the Oklahoma Construction Industries Board (CIB) to perform roofing work in the state. An active registry of roofing contractors may be viewed at: www.ok.gov/cib.

Question: What codes has the City of Norman adopted?

Answer: The City of Norman has adopted the 2015 I-Codes with amendments from the OUBCC and Local Amendments. They can be found here. (click to be redirected)

2015 International Residential Code

<https://codes.iccsafe.org/content/IRC2015/chapter-9-roof-assemblies>

2015 OUBCC Amendments

<https://www.ok.gov/oubcc/documents/2018%2009%2017%20IRC%202015%20Amended.pdf>

2015 Local Amendments

https://www.normanok.gov/sites/default/files/documents/2020-05/200117_2015%20IRC%20amendments_B.pdf

Question: How many layers of asphalt shingles can we have installed on the roof?

Answer: 1(one) (R908.3.1.1 and OUBCC Amendment)

Roof re-cover not allowed. A *roof recover* shall not be permitted where any of the following conditions occur:

1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
 2. Where the existing roof covering is slate, clay, cement or asbestos-cement tile.
 3. Where the existing roof has two or more applications of any type of roof covering.
 4. Where the existing roof has one or more application of asphalt shingles additional applications of asphalt shingles shall not be permitted.
-

Question: What does the Code say about products I can use for underlayment for Asphalt Shingles?

Answer: For our wind speeds underlayment must comply with ASTM D 226 Type I, ASTM D 4869 Type I, II, III, IV or ASTM D 6757. Also self-adhering polymer-modified bitumen underlayment complying with ASTM D 1970 if allowed by shingle, and underlayment instructions (905.1.1 exceptions). (Table 905.1.1(1))

Question: How does the underlayment for asphalt shingles need to be applied?

Answer: Table R905.1.1(2) gives two different methods based on roof slopes.

1. For roof slopes from two units vertical in 12 units horizontal (2:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied in the following manner: apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.
 2. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied in the following manner: underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches, Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet.
-

Question: How does the underlayment for asphalt shingles need to be secured?

Answer: Underlayment should be fastened sufficiently to hold in place per Table R905.1.1(3)

Question: How does one install valleys?

Answer: Several options per R905.2.8.2.

Valleys. Valley linings shall be installed in accordance with the manufacturer’s instructions before applying shingles. Valley linings of the following types shall be permitted:

1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be not less than 24 inches (610 mm) wide and of any of the corrosion resistant metals in Table R905.2.8.2.
 2. For open valleys, valley lining of two plies of mineral-surfaced roll roofing, complying with ASTM D 3909 or ASTM D 6380 Class M, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer not less than 36 inches (914 mm) wide.
 3. For closed valleys (valley covered with shingles), valley lining of one ply of smooth roll roofing complying with ASTM D 6380 and not less than 36 inches wide (914 mm) or valley lining as described in Item 1 or 2 shall be permitted. Self-adhering polymer modified bitumen underlayment complying with ASTM D 1970 shall be permitted in lieu of the lining material.
-

Question: What materials can I use for valley lining?

Answer: Table 905.2.8.2 provides a list of materials.

**TABLE R905.2.8.2
VALLEY LINING MATERIAL**

MATERIAL	MINIMUM THICKNESS (inches)	GAGE	WEIGHT (pounds)
Cold-rolled copper	0.0216 nominal	—	ASTM B 370, 16 oz. per square foot
Lead-coated copper	0.0216 nominal	—	ASTM B 101, 16 oz. per square foot
High-yield copper	0.0162 nominal	—	ASTM B 370, 12 oz. per square foot
Lead-coated high-yield copper	0.0162 nominal	—	ASTM B 101, 12 oz. per square foot
Aluminum	0.024	—	—
Stainless steel	—	28	—
Galvanized steel	0.0179	26 (zinc coated G90)	—
Zinc alloy	0.027	—	—
Lead	—	—	2½
Painted terne	—	—	20

For SI: 1 inch = 25.4 mm, 1 pound = 0.454 kg.

Question: Do I need to install a Drip Edge?

Answer: Yes. (R905.2.8.5)

Drip edge. A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of drip edge shall be overlapped not less than 2 inches (51mm). Drip edges shall extend not less than 1/4 inch (6.4mm) below the roof sheathing and extend up back onto the roof deck not less than 2 inches (51 mm). Drip edges shall be mechanically fastened to the roof deck at not more than 12 inches (305 mm) o.c. with fasteners as specified in Section R905.2.5. Underlayment shall be installed over the drip edge along eaves and under the drip edge along rake edges.

Question: Does the drip edge have to be metal?

Answer: No. (OUBCC Amendment to R905.2.8.5)

Exception: If a nominal 1 inch by 2 inch (25 mm by 51 mm) shingle mold is used, attached to the fascia and the starter course of shingles is extended a minimum of 1/4 inch (6.35 mm) and not more than 1 inch (25 mm) then a metal drip edge is not required.

Question: Does the code obligate Ice Barrier Underlayment?

Answer: No (Table R301.2 (1))

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY ¹	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ²	ICE BARRIER UNDERLAYMENT REQUIRED ³	FLOOD HAZARDS ⁴	AIR FREEZING INDEX ⁵	MEAN ANNUAL ⁶
	Speed ⁷ (mph)	Topographic effects ⁸	Special wind region ⁹	Wind-borne debris zone ¹⁰		Weathering ¹¹	Frost line depth ¹²	Termite ¹³					
10 lbs/ft ²	115	NO	NO	NO	C	Moderate	18"	Moderate to Heavy	13 ⁰ F	NO	Section 22-429.1(3) Code of C.O.N.	300	61.3 ⁰ F

Question: What does the code say about roof decking and asphalt shingles?

Answer: Per R905.2.1 Sheathing requirements. Asphalt shingles shall be fastened to SOLIDLY SHEATHED DECKS in accordance with Section R803 or to the asphalt shingles manufacturer's installation instructions.

Question: Does the code allow 1x materials to be used for asphalt singles?

Answer: Yes (R803.1/Table R803.1) Lumber sheathing. Allowable spans for lumber used as roof sheathing shall conform to Table R803.1.

MINIMUM THICKNESS OF LUMBER ROOF SHEATHING

RAFTER OR BEAM SPACING (inches)	MINIMUM NET THICKNESS (inches)
24	$\frac{5}{8}$

Question: Do the manufactures of Asphalt Shingles allow their products to be installed on Lumber Sheathing like 1x materials?

Answer: Consult the manufactures installation instructions of the shingle you want to use some do others do not.