

# TYPICAL UNDERLAYMENT INSTALLATION DETAILS



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## A. WARNING

1. DO NOT USE ANY TYPE OF ROSIN PAPER UNDER ANY BERRIDGE METAL PRODUCT.

## B. ROOF SURFACE PREPARATION

1. CLEAN ROOF SURFACE OF ALL OBJECTS WHICH MAY PUNCTURE OR TEAR UNDERLAYMENT.
2. DAILY INSPECT AND CLEAN ROOF SURFACE DURING INSTALLATION OF UNDERLAYMENTS AND OR BERRIDGE METAL PRODUCTS.

## C. # 30 FELT UNDERLAYMENT

1. USE A MINIMUM # 30 FELT UNDERLAYMENT AND COVER THE ENTIRE ROOF DECK. ADDITIONAL # 30 FELT UNDERLAYMENT WILL BE REQUIRED AT FLASHING CONDITIONS AS SHOWN IN THE FOLLOWING DETAILS.
2. A DOUBLE LAYER OF # 30 FELT IS RECOMMENDED TO COVER THE ENTIRE ROOF DECK WHEN ROOF SLOPES ARE 3:12 OR LESS.

## D. ICE AND WATERSHIELD

1. A BERRIDGE APPROVED PEEL-AND-STICK UNDERLAYMENT OR EQUAL MAY BE USED AS A SUBSTITUTE FOR # 30 FELT UNDERLAYMENT.
2. A BERRIDGE APPROVED PEEL-AND-STICK UNDERLAYMENT OR EQUAL IS RECOMMENDED AS UNDERLAYMENT FOR ALL CURVED SURFACES WHICH BERRIDGE PRODUCTS ARE TO BE APPLIED TO.
3. DUE TO # 30 FELT UNDERLAYMENTS TENDENCY TO TEAR WHEN USED OVER CORRUGATED DECKING, BERRIDGE MANUFACTURING RECOMMENDS A BERRIDGE APPROVED PEEL-AND-STICK UNDERLAYMENT OR EQUAL TO BE USED AS AN UNDERLAYMENT FOR ALL CORRUGATED DECKS.

## E. INSTALLATION

1. INSTALL UNDERLAYMENT PARALLEL TO EAVE LINE STARTING AT EAVE.
2. CERTAIN FLASHING CONDITIONS WILL REQUIRE UNDERLAYMENT INSTALLATION PRIOR TO COVERING ENTIRE ROOF, SUCH AS VALLEY. REVIEW DETAILS TO VERIFY FOR YOUR PROJECT.
3. INSULATE BETWEEN BERRIDGE MANUFACTURING PRODUCTS AND WOOD, WOOD BLOCKING AND DISSIMILAR MATERIALS WITH UNDERLAYMENT.
4. UNDERLAYMENT MUST BE SMOOTH AND FREE FROM WRINKLES.
5. TEARS AND PUNCTURES MUST BE REPAIRED WITH ADDITIONAL UNDERLAYMENT.
6. UNDERLAYMENT MUST NOT BE ALLOWED TO DRY OUT DUE TO EXTENDED EXPOSURE TO THE ELEMENTS. DRIED OUT UNDERLAYMENT MUST BE REPLACED.
7. DO NOT INSTALL BERRIDGE PRODUCTS OVER INADEQUATE OR IMPROPER

8. VERIFY CORRECT METHOD OF INSTALLING ICE AND WATERSHIELD WITH ICE AND WATERSHIELD MANUFACTURER.

#### F. FASTENERS

1. USE A GALVANIZED OR COATED FASTENER.
2. USE BERRIDGE COATED FELT CAPS.
3. DO NOT USE CARBON OR COMMON STEEL FASTENERS.
4. DO NOT USE "TIN CAPS" OR ONE-PIECE NAIL CAPS.
5. USE OF IMPROPER FASTENERS AND OR FELT CAPS WILL CAUSE READ-THROUGH AND OR CORROSION OF BERRIDGE PRODUCTS.

#### G. LAPS

1. LAP # 30 FELT UNDERLAYMENT 6" AT HEAD AND 36" AT END TO END.
2. LAP ICE AND WATERSHIELD AS PER MANUFACTURERS SPECIFICATIONS.
3. ALWAYS LAP UNDERLAYMENT WITH SLOPE OF ROOF.
4. INSTALL UNDERLAYMENT PARALLEL WITH EAVE LINE. START INSTALLATION AT EAVE AND CONTINUE UP ROOF SLOPE.

ALL ARCHITECTURAL PRODUCTS REQUIRE CARE IN HANDLING AND INSTALLATION TO AVOID DAMAGING.

THESE INSTALLATION INSTRUCTIONS AND THE FOLLOWING TYPICAL DETAILS ARE INTENDED TO PROVIDE OUR CUSTOMERS WITH THE INFORMATION REQUIRED FOR AN AESTHETICALLY PLEASING AND FUNCTIONAL INSTALLATION OF THE BERRIDGE PANEL SYSTEMS.

**NOTE: ALL PRODUCTS, SPECIFICATIONS, DETAILS, AND INSTRUCTIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR SPECIFIC PROJECT DETAILS, CONTACT BERRIDGE.**

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## INSTALLATION INSTRUCTIONS

# UNDERLAYMENT



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# USE OF ROSIN PAPER WITH BUILDING UNDERLAYMENTS AND BERRIDGE METAL ROOF PANELS

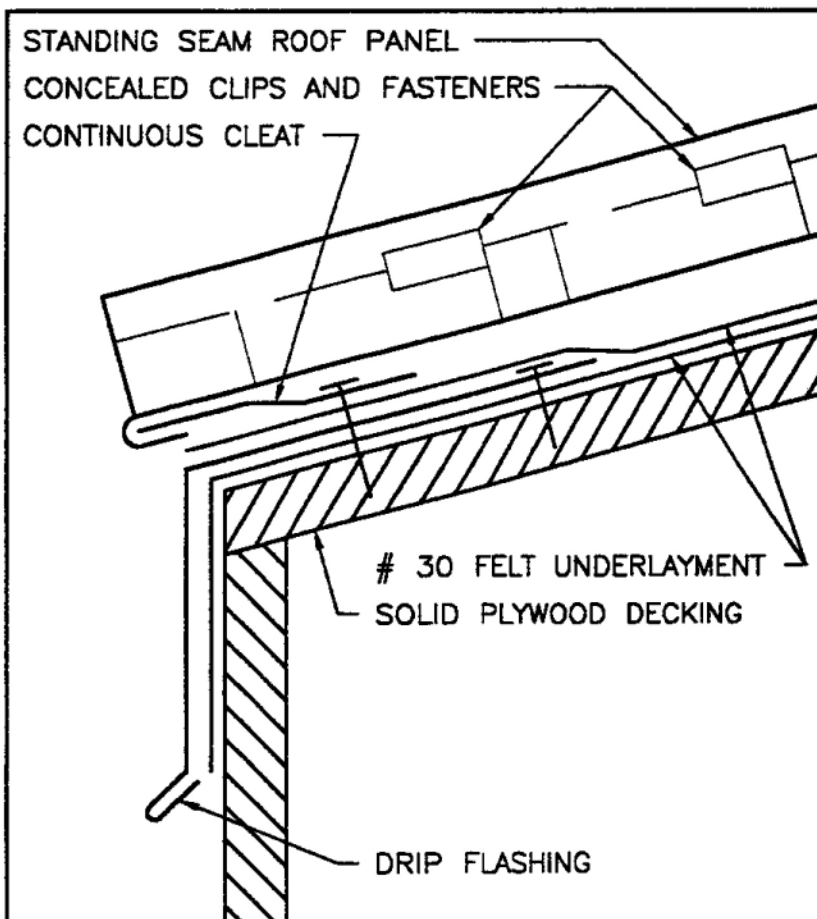
BERRIDGE RECOMMENDS THAT ROSIN PAPER NOT BE USED AS AN UNDERLAYMENT SEPARATION SHEET BETWEEN ROOFING UNDERLAYMENT AND BERRIDGE METAL ROOFING PANELS.

THE ORIGINAL PURPOSE FOR USING ROSIN PAPER AS A SEPARATION SHEET WAS TO PREVENT ROOFING FELT PAPER FROM BONDING TO METAL PANELS. IT HAS BEEN OUR EXPERIENCE, HOWEVER, THAT TODAY'S LIGHTER WEIGHT ASPHALT-IMPREGNATED ROOFING FELT PAPER DOES NOT BOND TO THE UNDERSIDE OF OUR METAL ROOF PANELS.

ANOTHER IMPORTANT FACTOR WHICH MAKES ROSIN PAPER UNNECESSARY IS THE FACT THAT ALL BERRIDGE PRODUCTS HAVE A WASH COAT OR CLEAR COAT ON THE UNDERSIDE OF THE METAL COIL, FLAT SHEET OR PANEL PRODUCT WHICH PREVENTS BONDING TO UNDERLAYMENT. THIS COATING IS FACTORY APPLIED ON THE BERRIDGE CONTINUOUS COIL COATING LINES.

MORE IMPORTANTLY, WE HAVE SEEN A NUMBER OF EXAMPLES OF PANEL FAILURE STEMMING FROM RUST-THROUGH FROM THE UNDERSIDE, CAUSED BY MOISTURE RETENTION OF ROSIN PAPER UNDERLAYMENT.

ALTHOUGH THE-ROSIN PAPER MAY NOT BE THE ORIGINAL CAUSE OF MOISTURE CONDENSATION, IT IS A POROUS MATERIAL WHICH WILL RETAIN MOISTURE AND THUS SHOULD NOT BE USED BENEATH METAL PANELS.

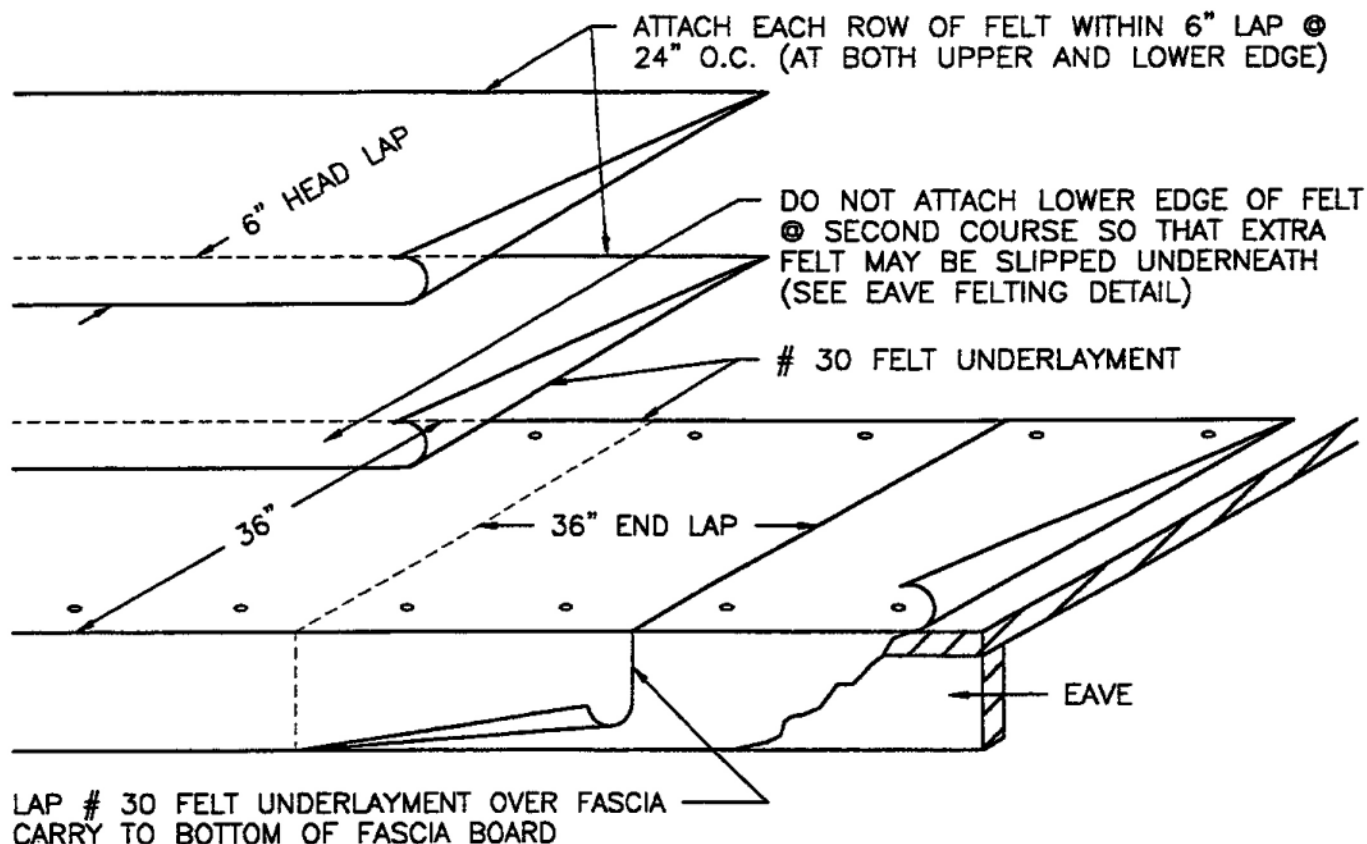


SECTION VIEW OF TYPICAL STANDING SEAM  
PANEL APPLICATION OVER SOLID DECKING  
WITH NUMBER 30 ROOFING FELT  
UNDERLAYMENT.

THE DETAILS CONTAINED IN THE FOLLOWING PAGES ARE MERELY RECOMMENDATIONS AS TO HOW BERRIDGE MANUFACTURING MATERIALS SHOULD BE INSTALLED. THEY MAY REQUIRE ADAPTATIONS OR MODIFICATIONS FOR A SPECIFIC PROJECT AS CONDITIONS VARY IN BOTH BUILDING DESIGN AND LOCAL WEATHER PECULIARITIES.

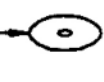
BERRIDGE MANUFACTURING COMPANY SHALL BE HELD HARMLESS FROM ANY AND ALL CLAIMS ARISING FROM LACK OF WATERTIGHTNESS AS A RESULT OF FOLLOWING THESE RECOMMENDED DETAILS. ENSURING WATERTIGHTNESS ON ANY GIVEN PROJECT IS THE FUNCTION OF THE INSTALLER. THE ARCHITECT/GENERAL CONTRACTOR/INSTALLER MUST ACCEPT THE RESPONSIBILITY TO ADAPT THESE DETAILS TO MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATERTIGHTNESS.

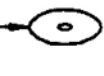

THE INSTALLER CAN VIRTUALLY ASSURE WATERTIGHTNESS IF THESE FLASHING DETAILS HAVE BEEN PROPERLY ADAPTED, ADEQUATE LAPS HAVE BEEN PROVIDED, CORRECT TYPE OF SEALANT USED, ALL JOINTS ADEQUATELY CAULKED AND PROFESSIONAL WORKMANSHIP EMPLOYED.



1. CLEAN ROOF SURFACE OF ALL OBJECTS WHICH MAY PUNCTURE OR TEAR FELT UNDERLAYMENT.
2. ATTACH FELT UNDERLAYMENT TO DECK BELOW USING COATED FELT CAPS. FASTENERS MUST BE TOTALLY FLUSH WITH SUBSTRATE. DO NOT USE ONE PIECE NAIL CAPS, AS THESE WILL "READ THROUGH" THE SURFACE.
3. DO NOT FASTEN LOWER EDGE OF FELT @ SECOND COURSE (SEE ABOVE ILLUSTRATION).
4. ALWAYS RUN FELT UNDERLAYMENT HORIZONTALLY STARTING @ THE EAVE AND LAP SHINGLE FASHION.
5. NEVER INSTALL BERRIDGE PRODUCTS OVER FELT UNDERLAYMENT THAT IS NOT LAID HORIZONTAL, FLAT, SMOOTH AND FREE FROM PUNCTURES AND TEARS.
6. DO NOT APPLY PANELS OVER DRY OR BRITTLE FELT (A CONDITION CAUSED BY EXTENDED EXPOSURE TO THE ELEMENTS).
7. DO NOT USE RED ROSIN PAPER UNDER ANY BERRIDGE METAL PRODUCT.

  
 1 PC. NAIL CAP  
 (DO NOT USE)

  
 2 PC. NAIL CAP  
 (USE THIS)

 BERRIDGE COATED FELT CAP
  GALVANIZED OR COATED FASTENER



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## STANDARD APPLICATION PROCEDURES

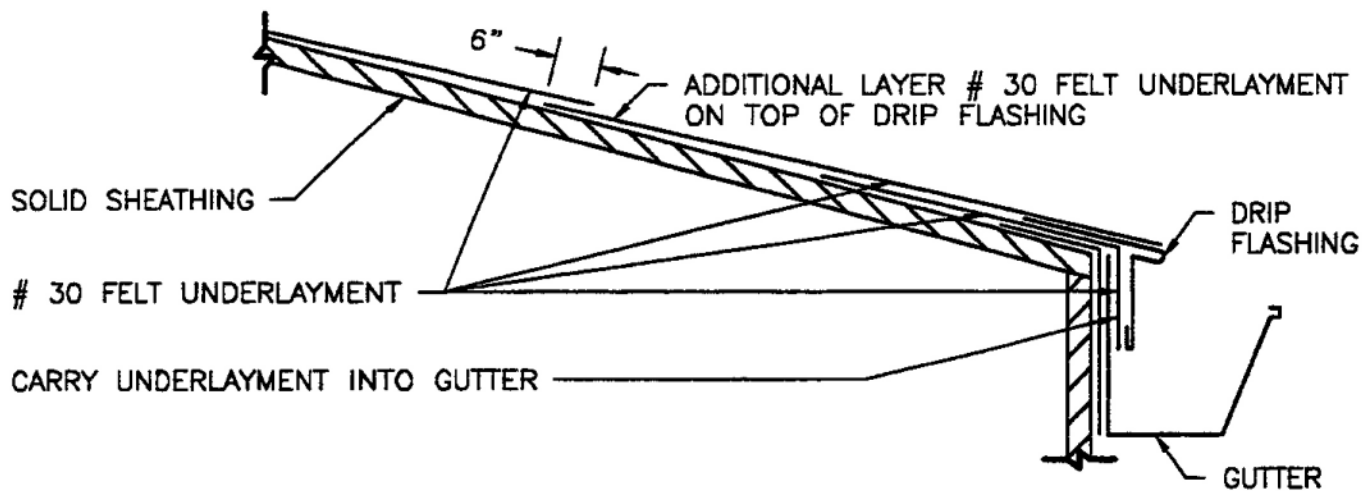
# UNDERLAYMENT

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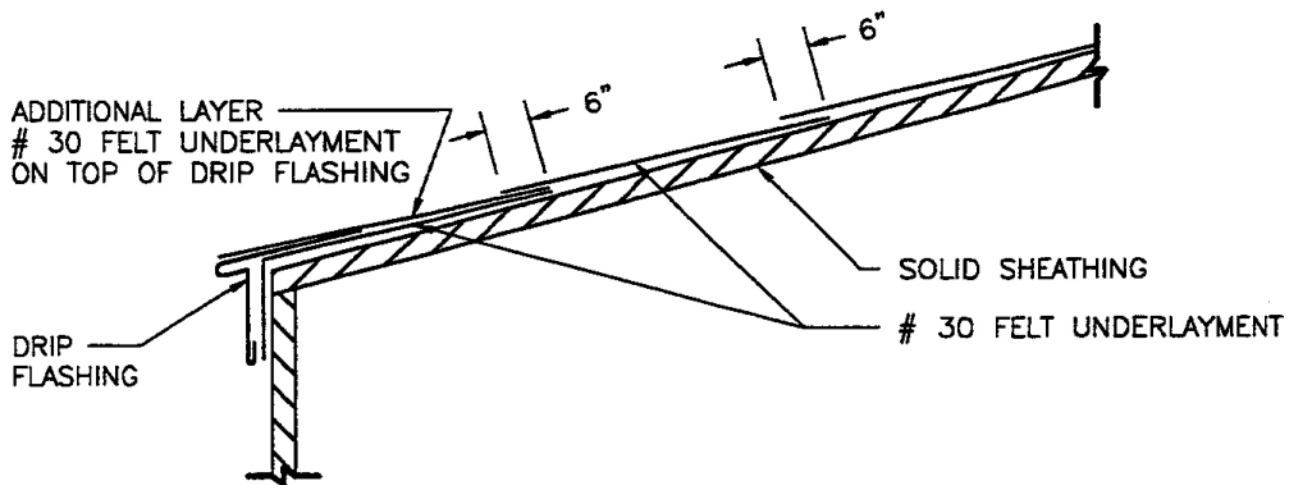
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GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## EAVE WITH GUTTER

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## EAVE



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EAVE WITH GUTTER  
EAVE

**UNDERLAYMENT**

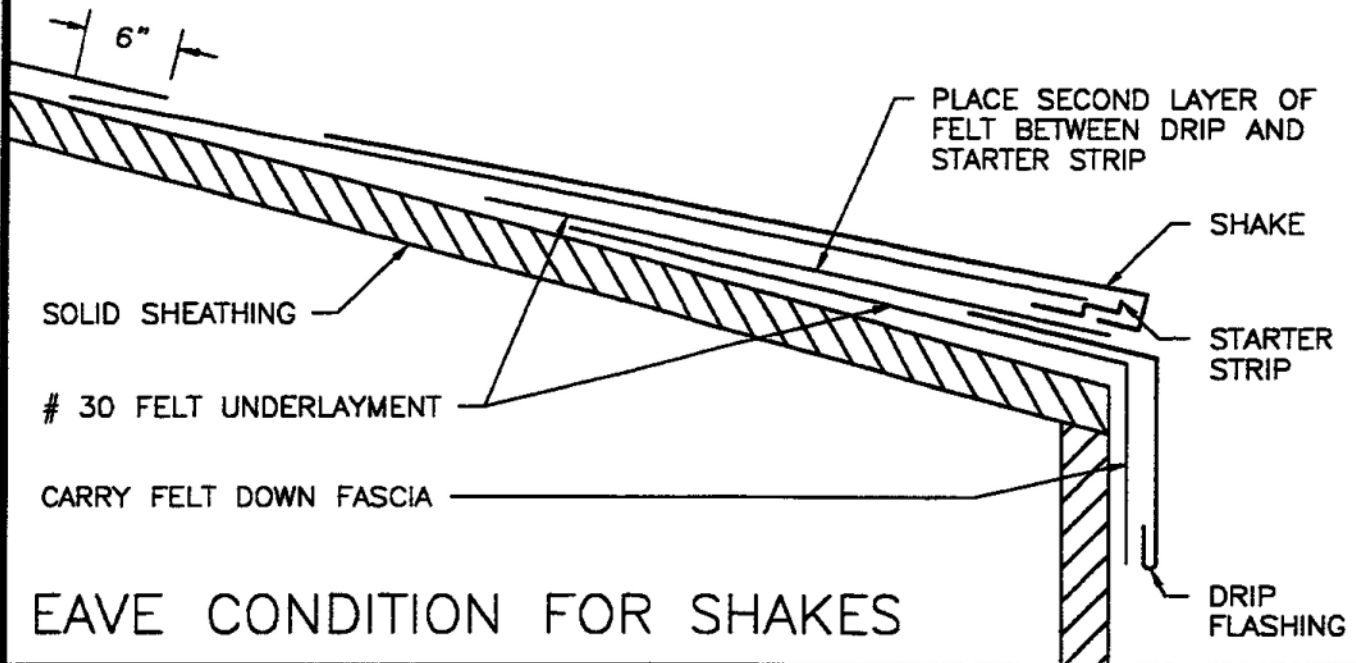
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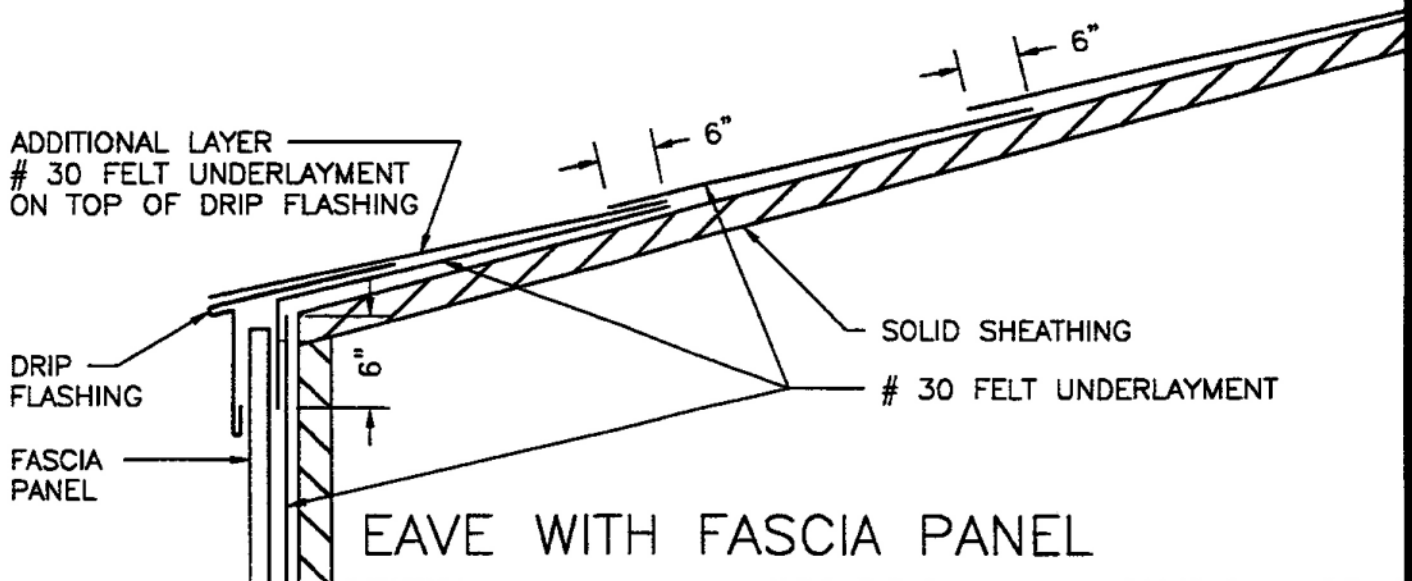


GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## EAVE CONDITION FOR SHAKES

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## EAVE WITH FASCIA PANEL

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EAVE WITH SHAKES  
EAVE WITH FASCIA

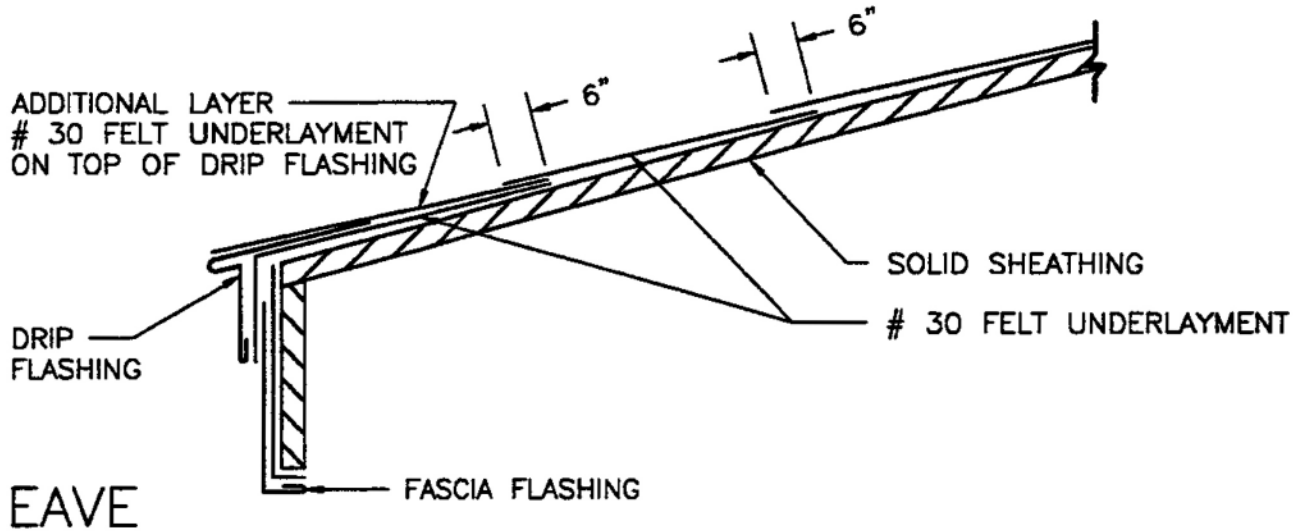
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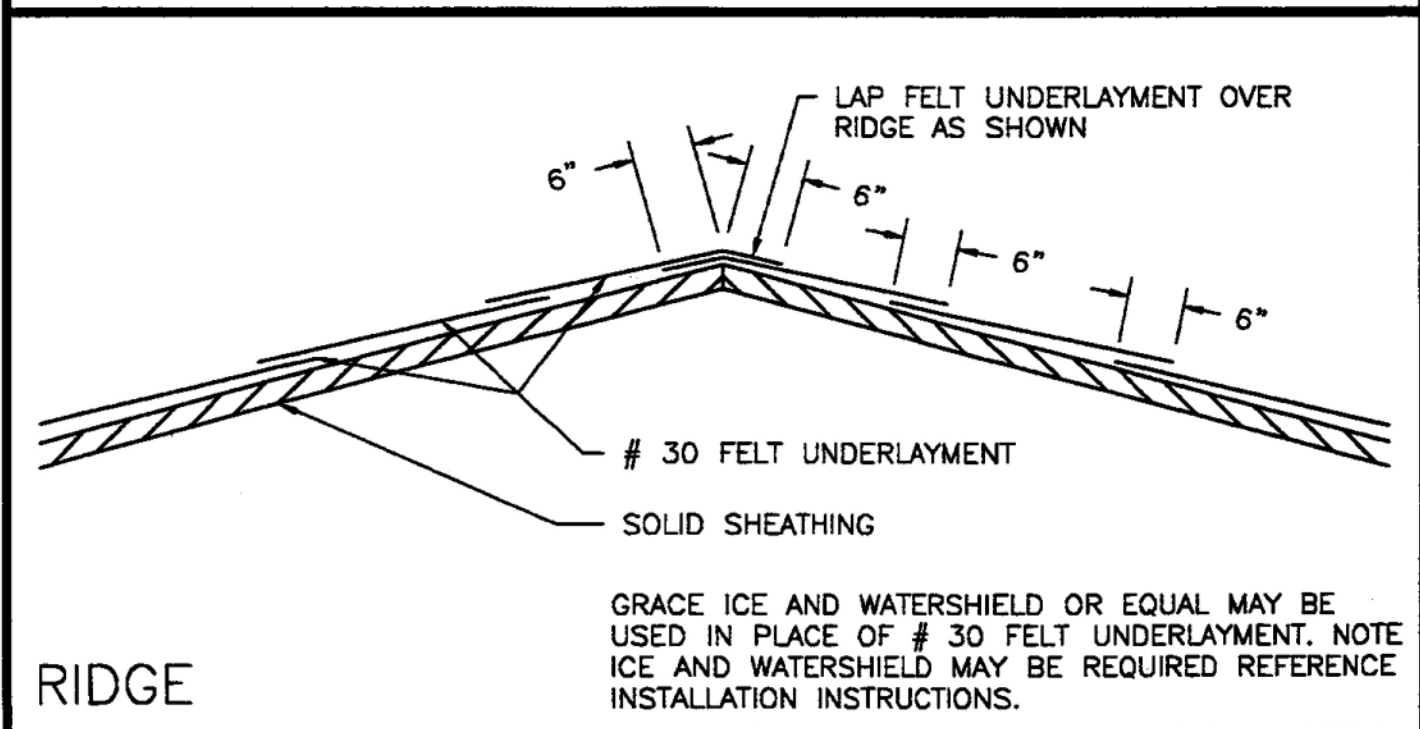
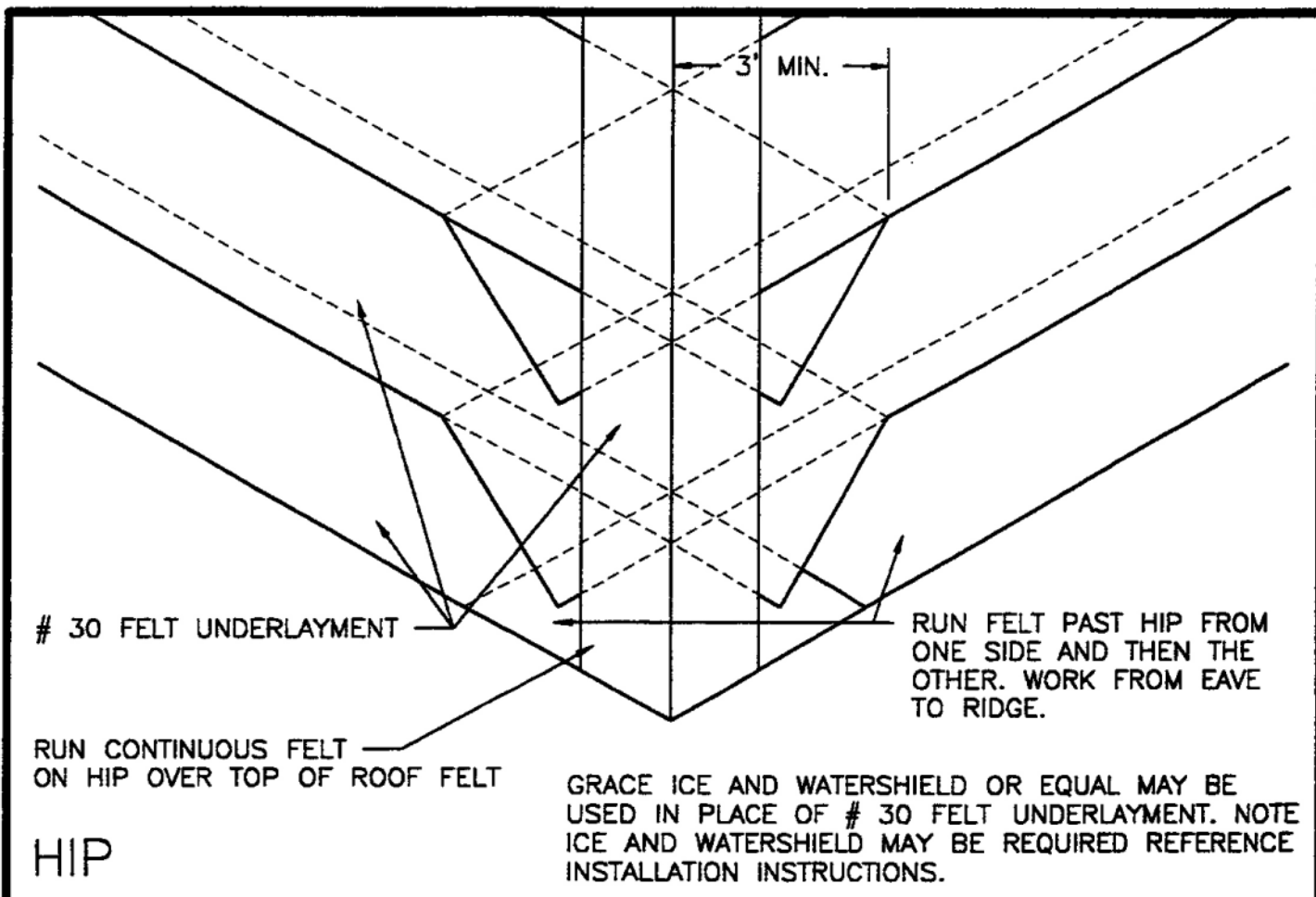


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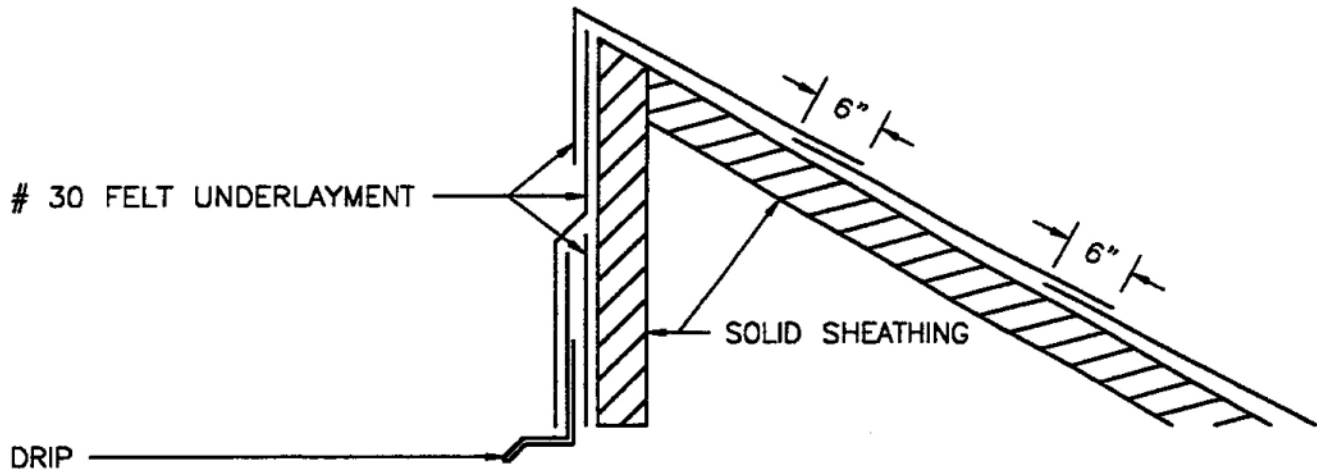
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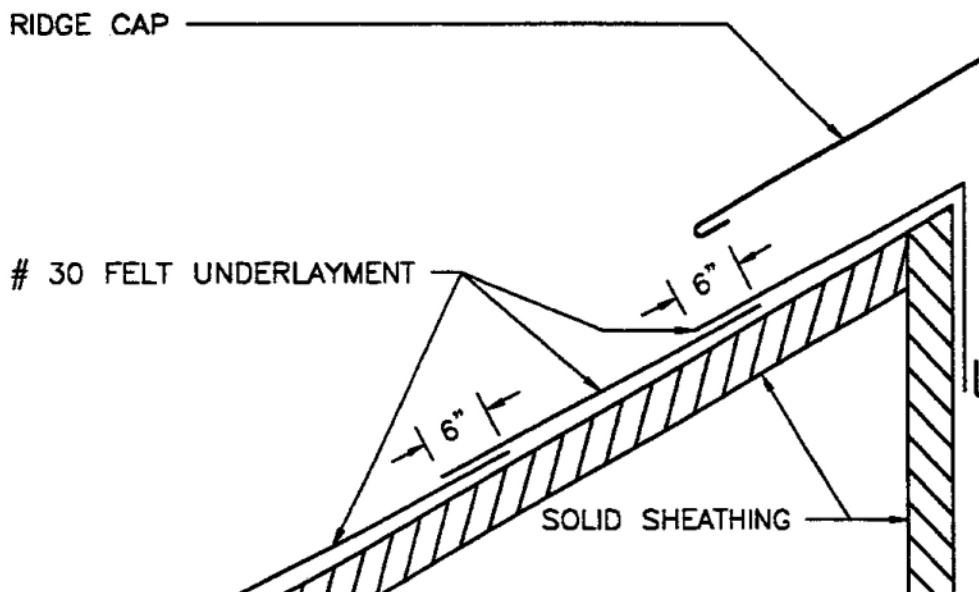


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	<p><b>UNDERLAYMENT</b></p>	<p>PAGE\FILE U-20</p>

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## SHED RIDGE WITH WALL PANEL



## SHED RIDGE

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SHED RIDGE WITH WALL PANEL  
SHED RIDGE

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# UNDERLAYMENT



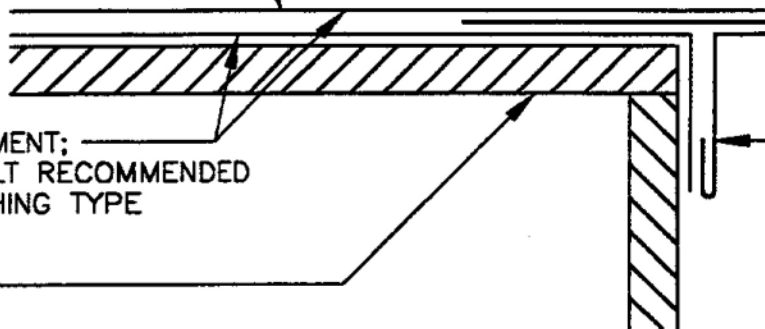
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# 30 FELT UNDERLAYMENT  
RUN (1) LAYER OF FELT  
ON TOP OF DRIP FLASHING  
PARALLEL TO GABLE

# 30 FELT UNDERLAYMENT;  
DOUBLE LAYER OF FELT RECOMMENDED  
REGARDLESS OF FLASHING TYPE

SOLID SHEATHING



DRIP FLASHING

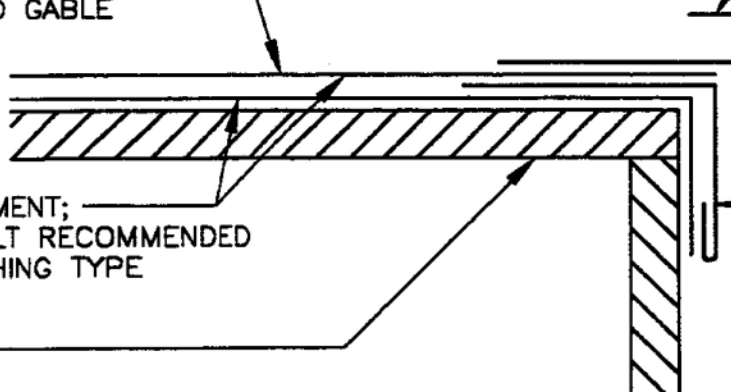
GRACE ICE AND WATERSHIELD OR EQUAL MAY BE  
USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE  
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INSTALLATION INSTRUCTIONS.

GABLE

# 30 FELT UNDERLAYMENT  
RUN (1) LAYER OF FELT  
BETWEEN CHANNEL AND DRIP  
FLASHING PARALLEL TO GABLE

# 30 FELT UNDERLAYMENT;  
DOUBLE LAYER OF FELT RECOMMENDED  
REGARDLESS OF FLASHING TYPE

SOLID SHEATHING



CHANNEL  
FLASHING  
OR J-CLIP

DRIP FLASHING

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE  
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GABLE



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GABLE

UNDERLAYMENT

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# 30 FELT UNDERLAYMENT  
RUN (1) LAYER OF FELT  
ON TOP OF DRIP FLASHING  
PARALLEL TO GABLE

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE  
USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE  
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# 30 FELT UNDERLAYMENT;  
DOUBLE LAYER OF FELT RECOMMENDED  
REGARDLESS OF FLASHING TYPE

SOLID SHEATHING

# 30 FELT UNDERLAYMENT

DRIP  
FLASHING

DRIP  
FLASHING

## GABLE WITH WALL PANEL

# 30 FELT UNDERLAYMENT  
RUN (1) LAYER OF FELT  
ON TOP OF DRIP FLASHING  
PARALLEL TO GABLE

# 30 FELT UNDERLAYMENT;  
DOUBLE LAYER OF FELT RECOMMENDED  
REGARDLESS OF FLASHING TYPE

SOLID SHEATHING

# 30 FELT UNDERLAYMENT

FLASHING

DRIP  
FLASHING

## GABLE

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USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE  
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GABLE WITH WALL PANEL  
GABLE

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**UNDERLAYMENT**



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CAP FLASHING

COUNTER FLASHING

# 30 FELT UNDERLAYMENT

SUB-FLASHING

SOLID SHEATHING

# 30 FELT UNDERLAYMENT

6"

PARAPET

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.

# 30 FELT UNDERLAYMENT

COUNTER FLASHING

SUB-FLASHING

SOLID SHEATHING

# 30 FELT UNDERLAYMENT

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.

HEAD WALL



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PARAPET  
HEAD WALL

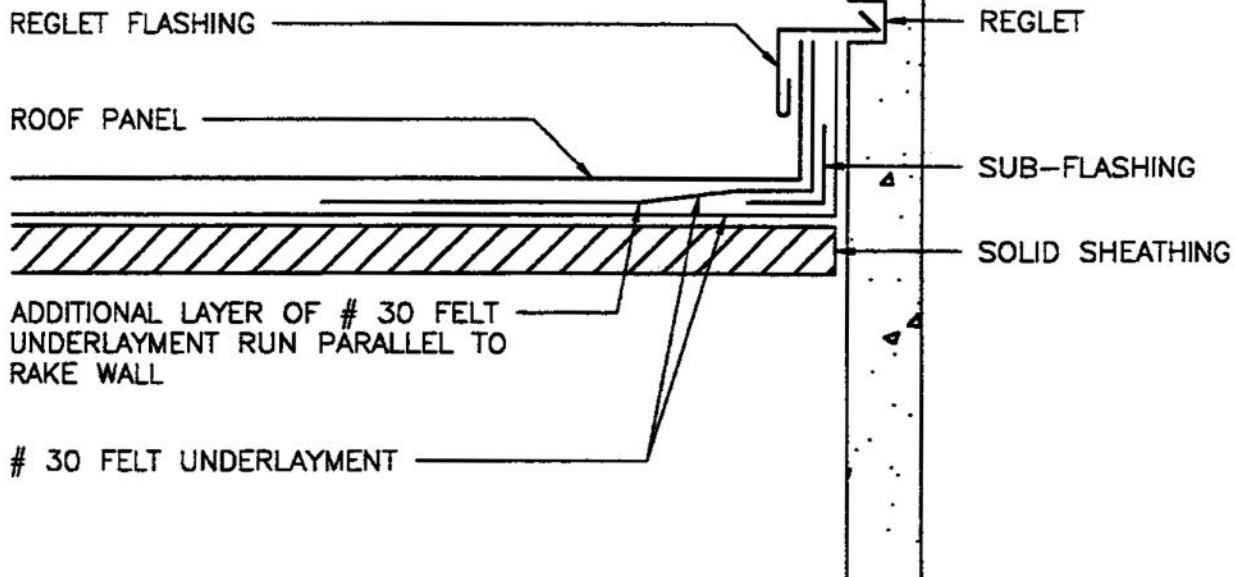
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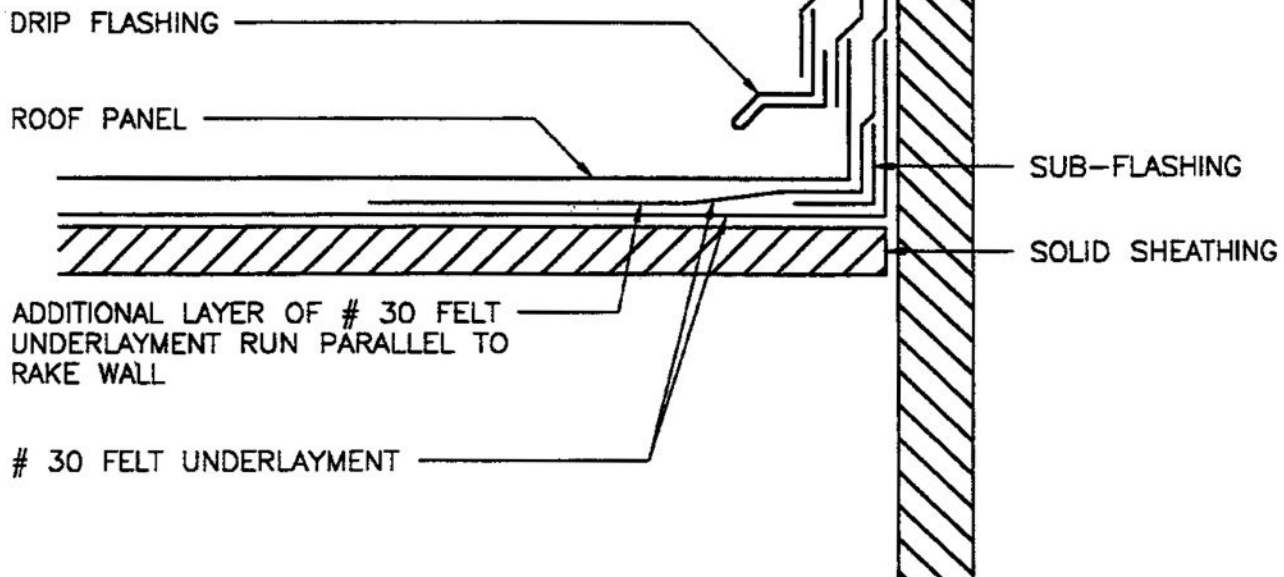
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GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## RAKE WALL WITH REGLET

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## RAKE WALL WITH WALL PANEL



GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.

COUNTER FLASHING

CHANNEL FLASHING

ADDITIONAL LAYER OF # 30 FELT UNDERLAYMENT RUN PARALLEL TO RAKE WALL

# 30 FELT UNDERLAYMENT

# 30 FELT UNDERLAYMENT

SUB-FLASHING

SOLID SHEATHING

RAKE WALL

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RAKE WALL

BERRIDGE



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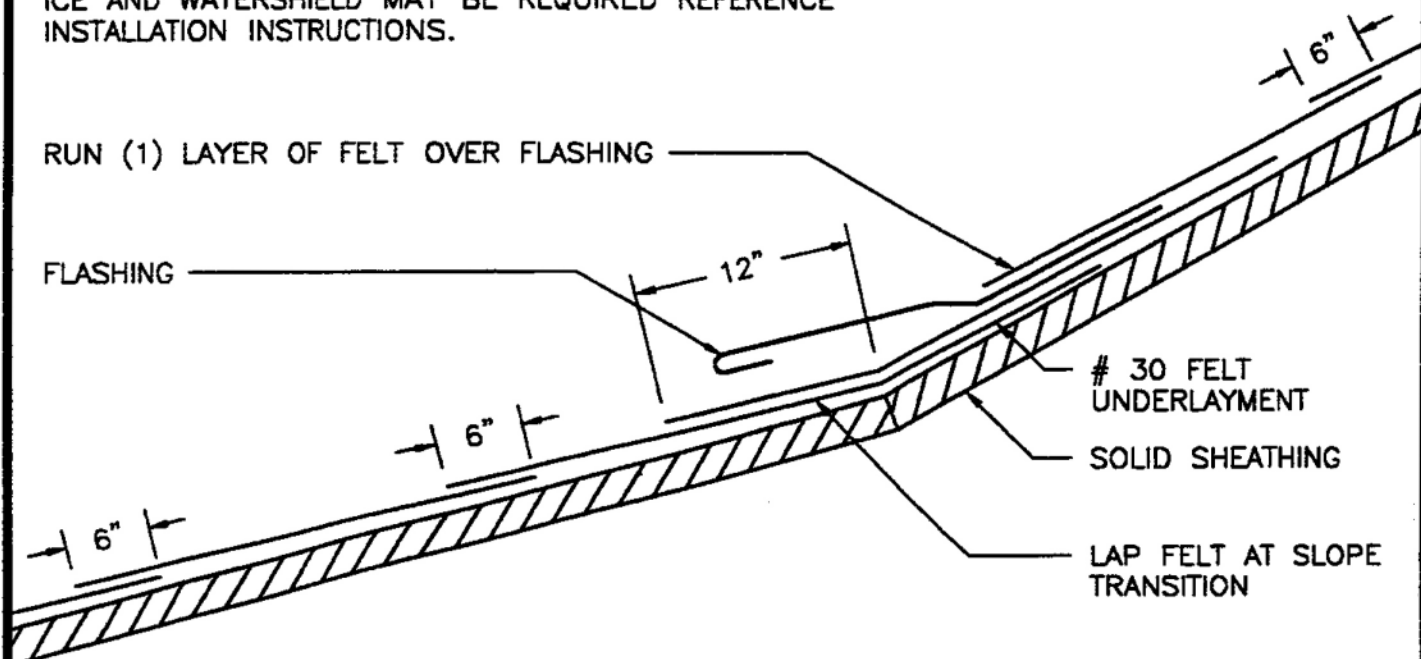
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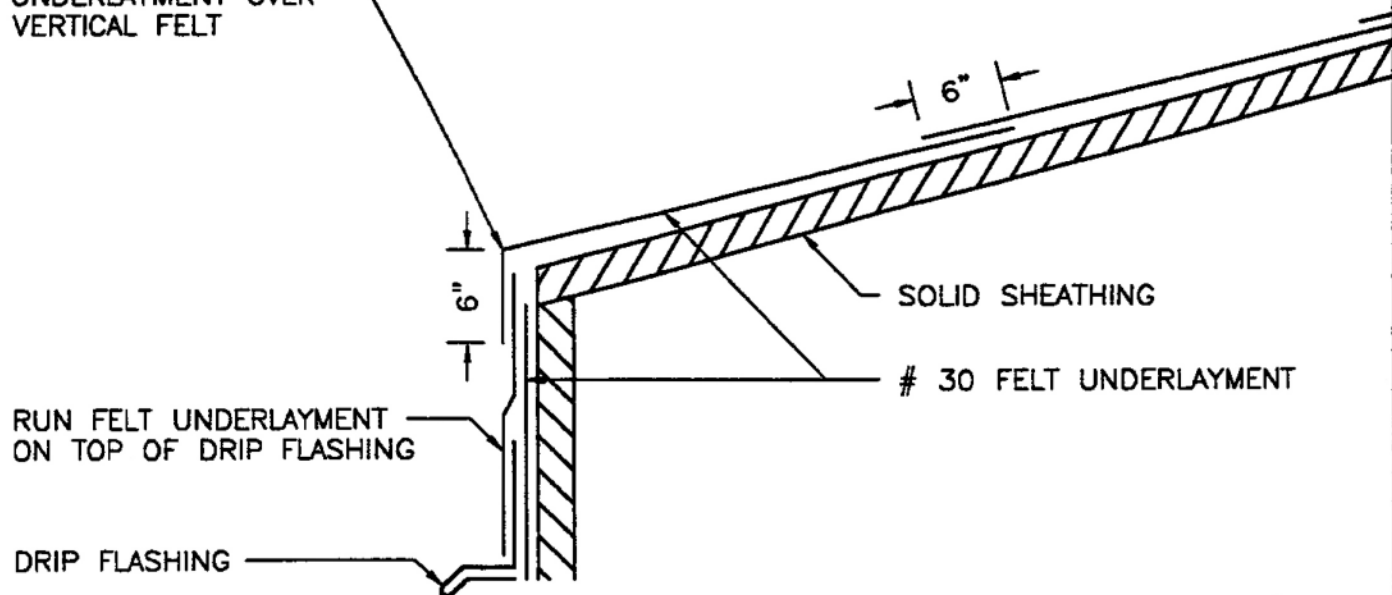
UNDERLAYMENT

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## SLOPE TRANSITION WITH FLASHING

LAP SLOPED FELT UNDERLAYMENT OVER VERTICAL FELT



## SLOPE TRANSITION

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



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SLOPE TRANSITION WITH FLASHING  
SLOPE TRANSITION

**UNDERLAYMENT**

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VALLEY FELT

FELT PARALLEL  
TO VALLEY

FELT PARALLEL  
TO EAVE

VALLEY FLASHING (WHEN  
VALLEY FLASHING LEGS  
EXCEED 16" USE 2 RUNS  
OF VALLEY FELT WITH 12"  
FELT LAP AT VALLEY)

PLAN VIEW

EAVE

CONTINUOUS # 30 FELT UNDERLAYMENT  
PARALLEL TO EAVE

VALLEY FLASHING

# 30 FELT UNDERLAYMENT;  
PARALLEL TO VALLEY FULL WIDTH EACH SIDE

SOLID SHEATHING

2 LAYERS # 30 VALLEY FELT UNDERLAYMENT  
FULL WIDTH

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE  
USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE  
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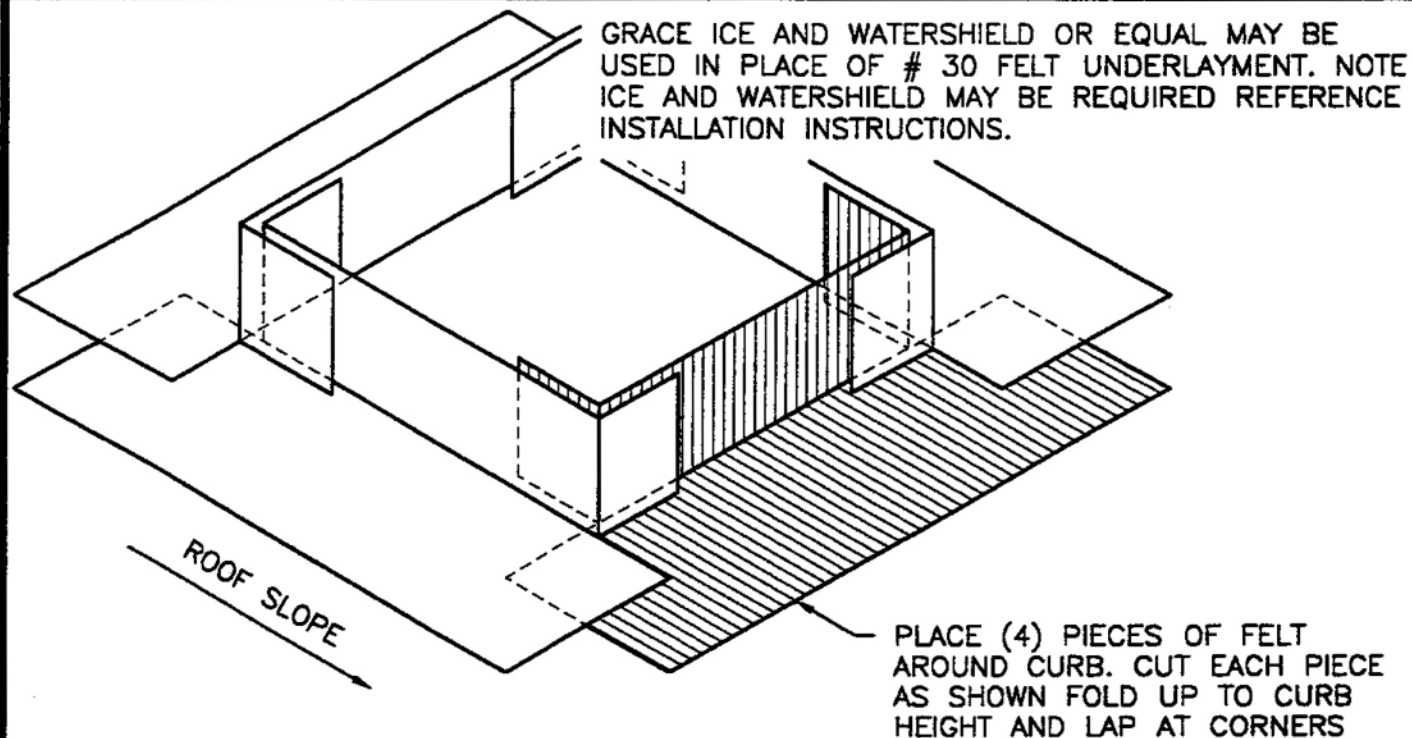


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VALLEY

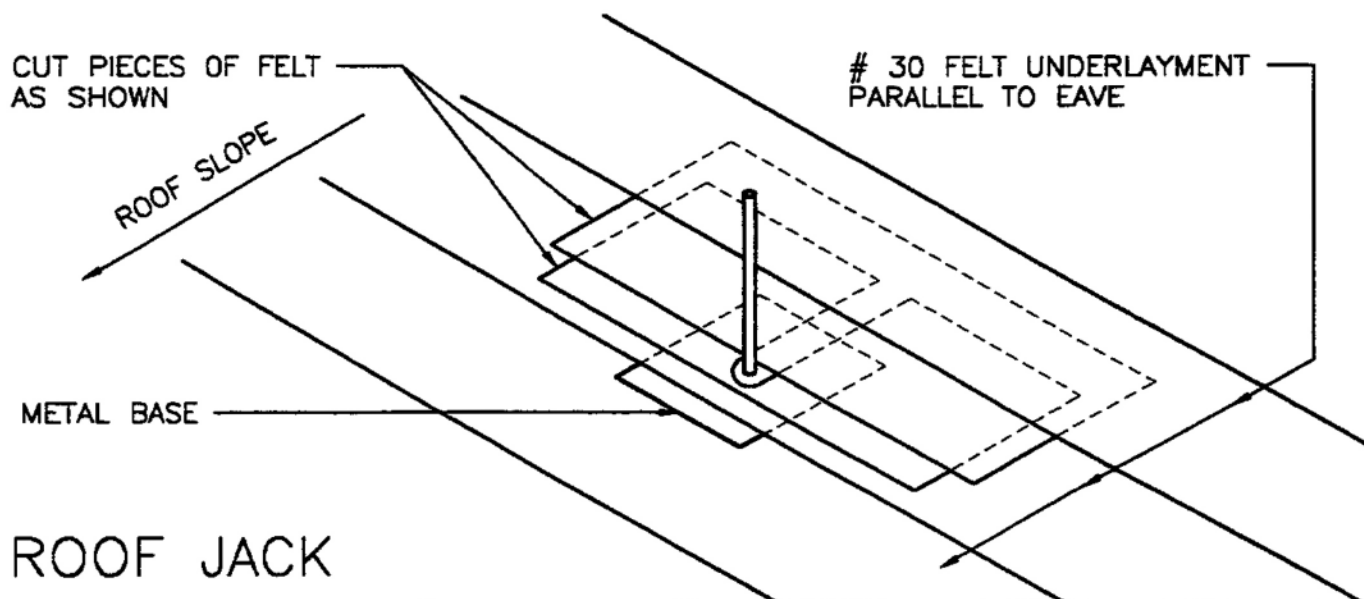
UNDERLAYMENT



## ROOF PENETRATION

LAP FELT OVER TOP OF BASE. INSULATE BETWEEN DISSIMILAR METALS WITH ROOFING FELT

GRACE ICE AND WATERSHIELD OR EQUAL MAY BE USED IN PLACE OF # 30 FELT UNDERLAYMENT. NOTE ICE AND WATERSHIELD MAY BE REQUIRED REFERENCE INSTALLATION INSTRUCTIONS.



## ROOF JACK