

UNDERLAYMENT INSTRUCTIONS

A. WARNINGS:

1. DO NOT use red rosin paper under metal roofing and trim
2. DO NOT use common steel (uncoated) fasteners for attachment of underlayment. Rusted nail heads can cause corrosion to underside of roof panels and trim.
3. DO NOT use membrane underlayment with a granulated or sandy surface.
4. DO NOT install panels over felt which has been exposed to excessive weathering. Never install panels over felt that is dry, brittle, torn, or wrinkled.

B. Substrate:

1. Ensure substrate is smooth and free from objects which may perforate felt.
2. Roof area should be swept clean of debris.

C. Typical Underlayment:

1. A single layer of #30 felt must be applied to entire roof deck.
2. An additional layer of #30 felt will be required at most flashing conditions.
3. A double layer of #30 felt is recommended to cover the entire roof deck when slopes are 3:12 or less.

D. Membrane Underlayment:

1. A membrane underlayment may be used as a substitute for #30 felt underlayment.
2. Membrane underlayment shall be:
 - W.R. Grace Ice and Water Shield
 - Tamko TW Underlayment
 - Cetco Strongseal HT
 - Tarco Leak Barrier PS 200 HT
 - Bakor Blueskin PE 200 HT
 - Interwrap Titanium – PSU
 - Polyglass Polystick MU
 - Protecto Wrap Rain Proof 40-60
3. USE ONLY SMOOTH SURFACE (NON-GRANULATED) MEMBRANE UNDERLAYMENT.
4. Membrane underlayment is required underlayment for curved roof decks.

E. Metal Decking:

1. When roof panels are to be installed directly over corrugated metal decking, it is recommended by Metal Panel Systems, Inc. to use a single layer of membrane underlayment in lieu of #30 felt. Felt has a tendency to tear or puncture due to foot traffic over open flutes.

F. Attachment:

1. Use only galvanized or coated fasteners for attachment of felt.
2. When installing felt directly over rigid insulation board, use coated insulation screws with insulation plates.

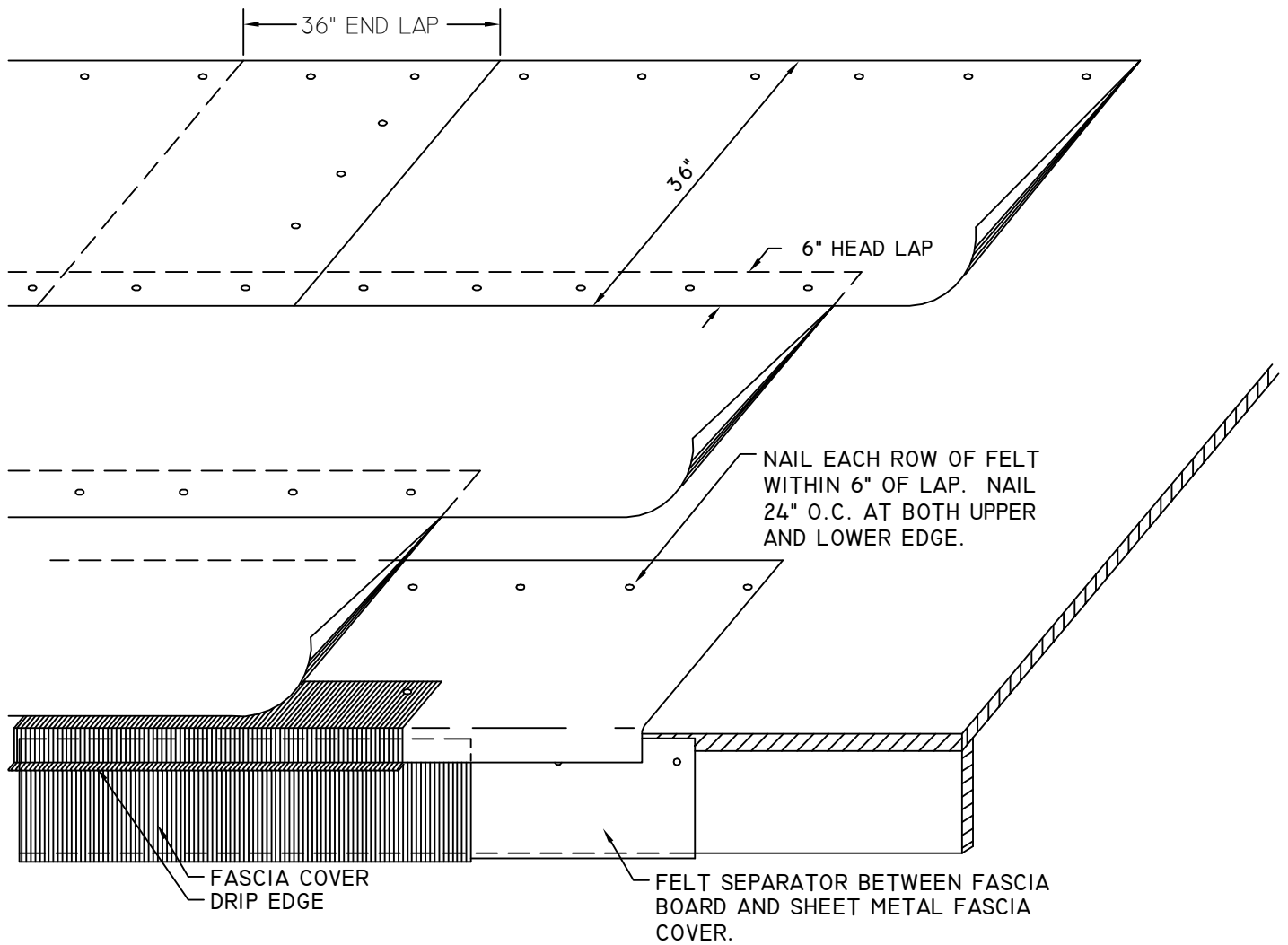
3. Install fasteners completely flush with deck. Raised fasteners have a tendency to “read through” the roof panels.

G. Installation:

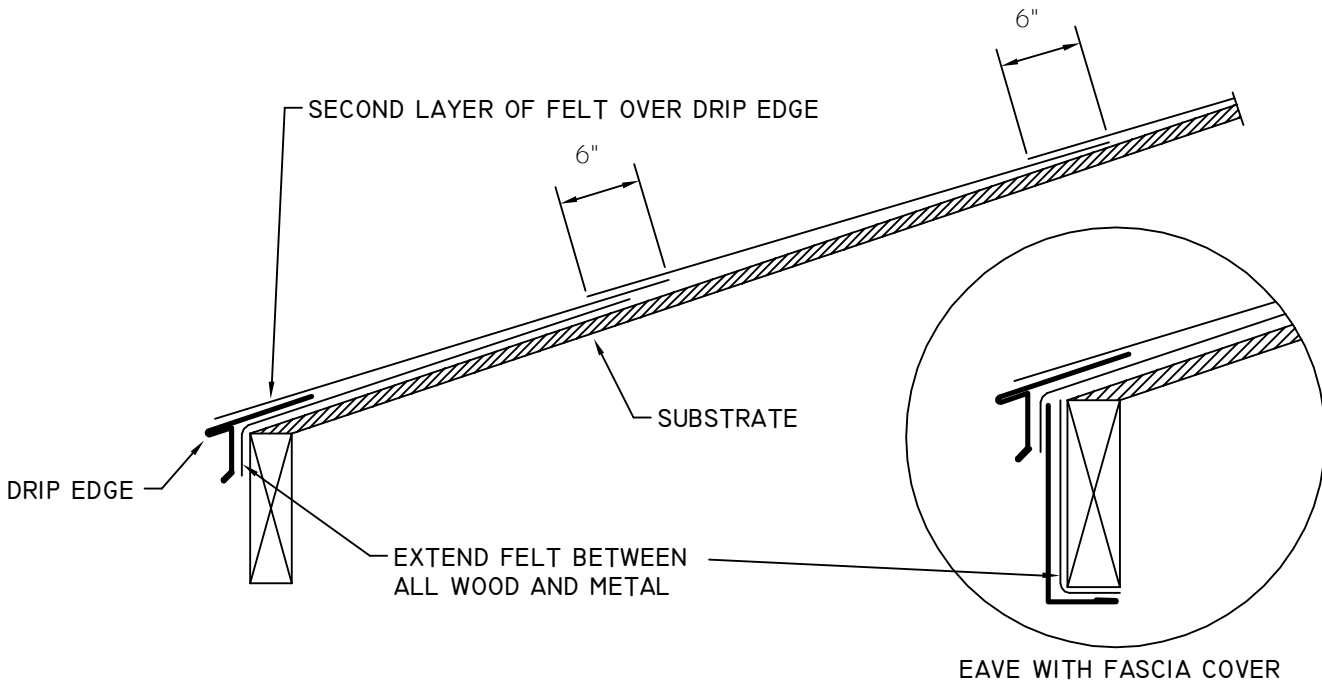
1. If applicable, begin installing underlayment over fascia boards as separator between wood and metal flashing. ALL METAL SHOULD BE INSULATED FROM WOOD AND DISSIMILAR METALS.
2. Install underlayment parallel to eave.
3. A double layer of felt is required at eave. First layer is installed under drip edge. The second layer is over drip edge.
4. Install underlayment smooth and free of wrinkles.
5. All tears or punctures must be repaired with additional underlayment.
6. Head laps shall be minimum of 6”.
7. End laps shall be minimum of 36”.
8. Always lap underlayment with slope of roof.

PLYWOOD SHEATHING

EAVE & FIELD FELT



* GRACE ICE & WATER SHIELD OR EQUAL MAY BE USED IN LIEU OF # 30 FELT.



Metal Panel Systems, Inc.

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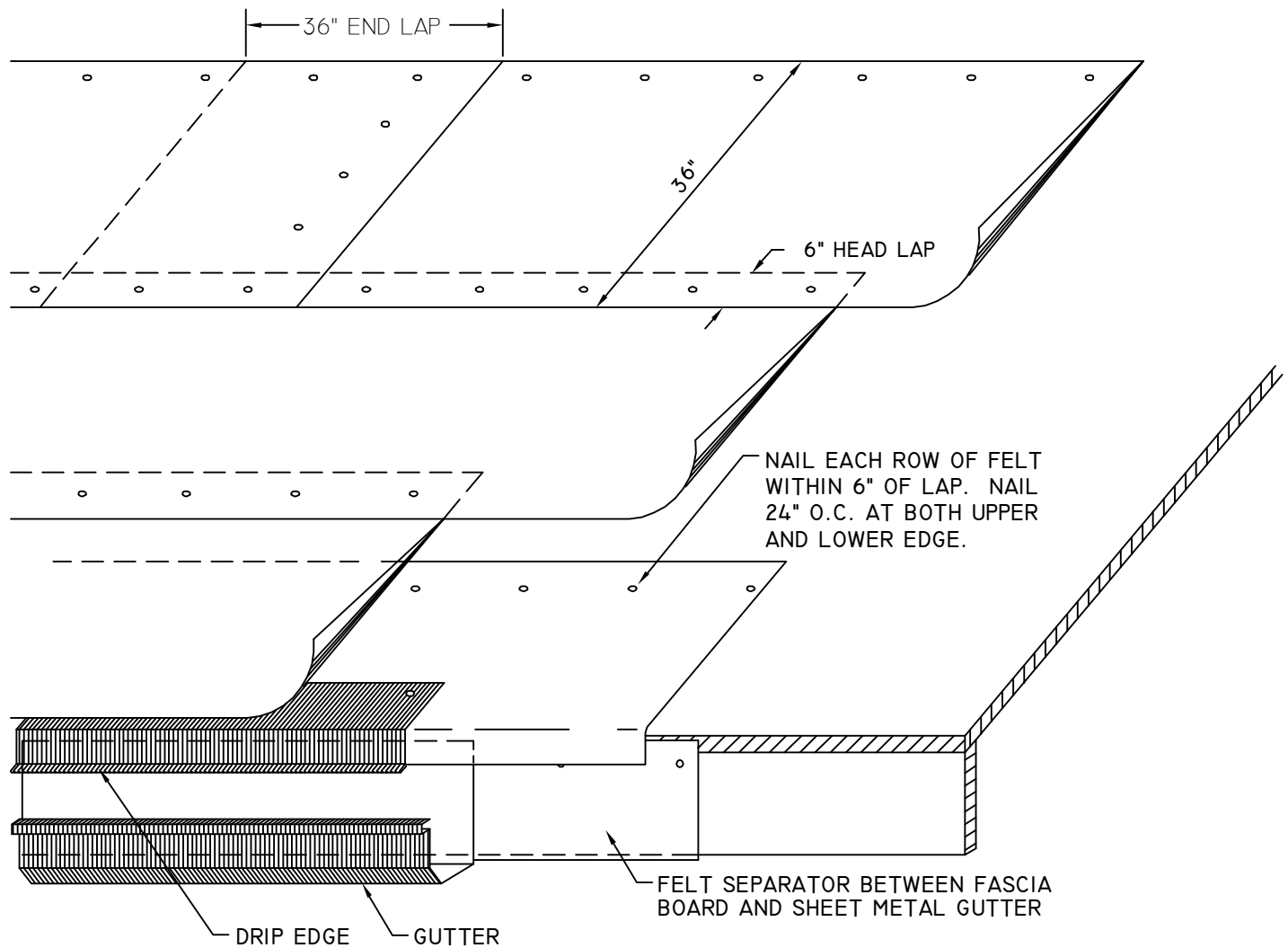
DETAILS AND INSTRUCTIONS SUBJECT TO CHANGE WITHOUT NOTICE. CONTACT MPSI FOR SPECIFIC PROJECT DETAILS.

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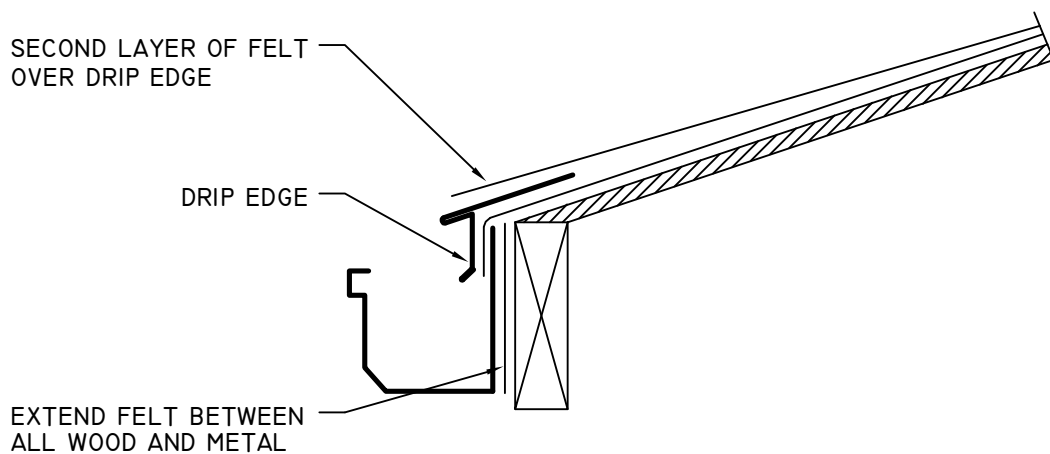
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EAVE WITH GUTTER

PLYWOOD SHEATHING



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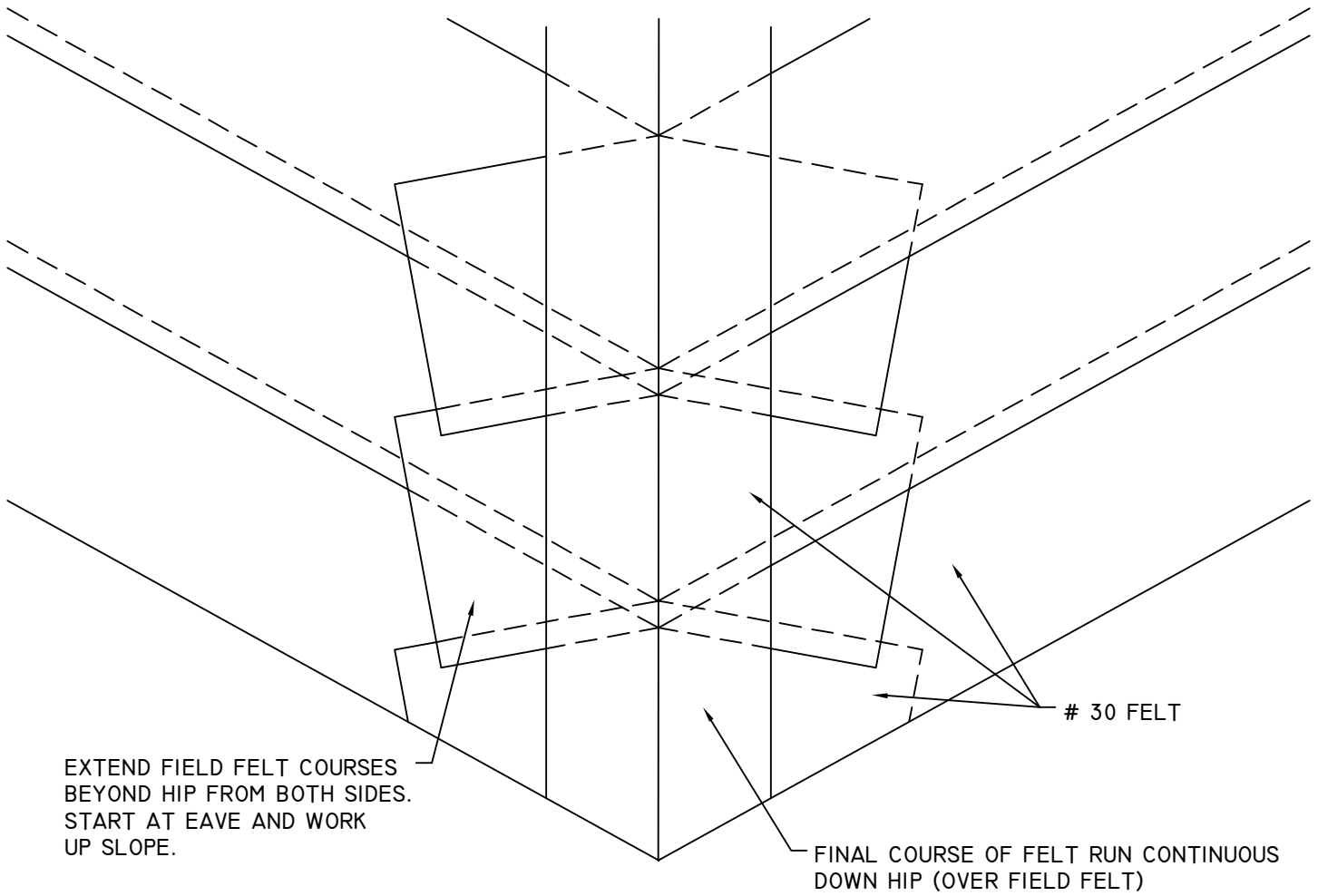
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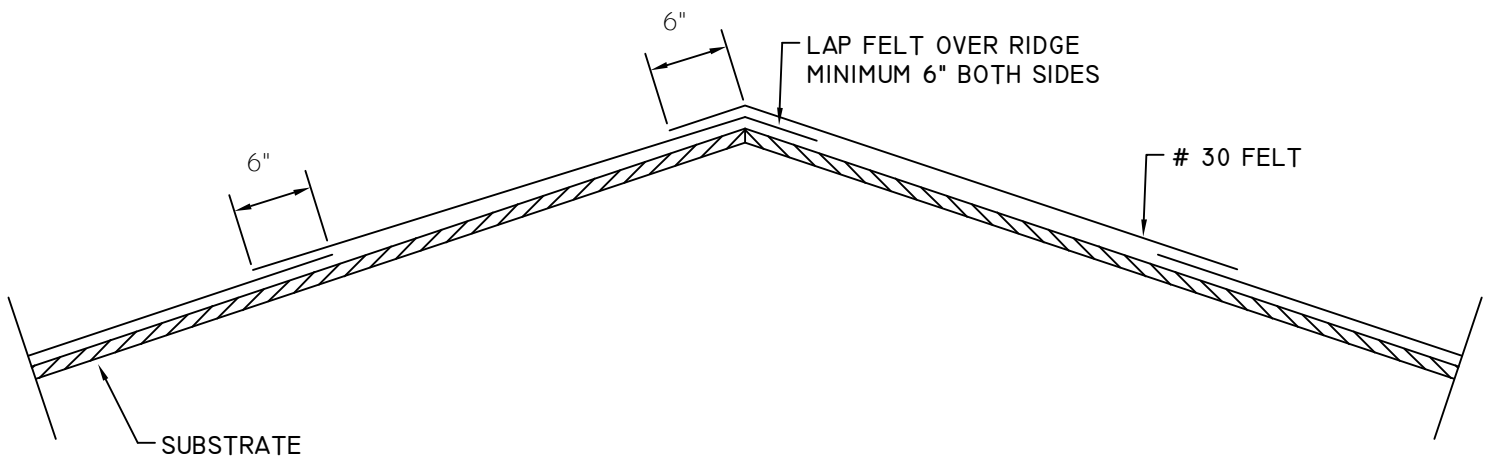
PLYWOOD SHEATHING

HIP FELT



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RIDGE FELT



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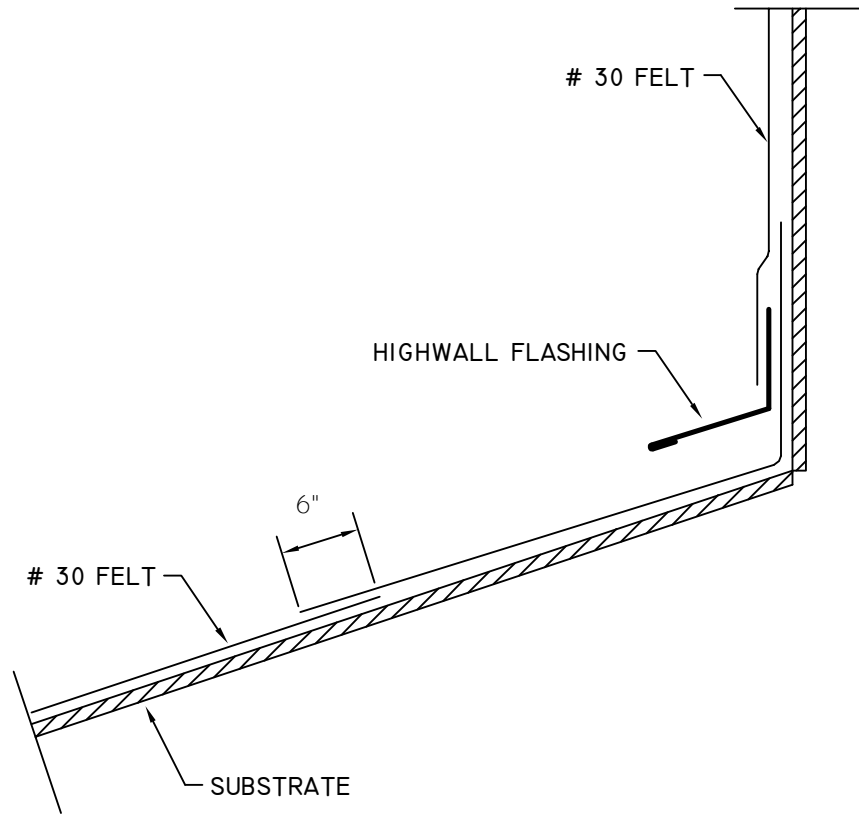
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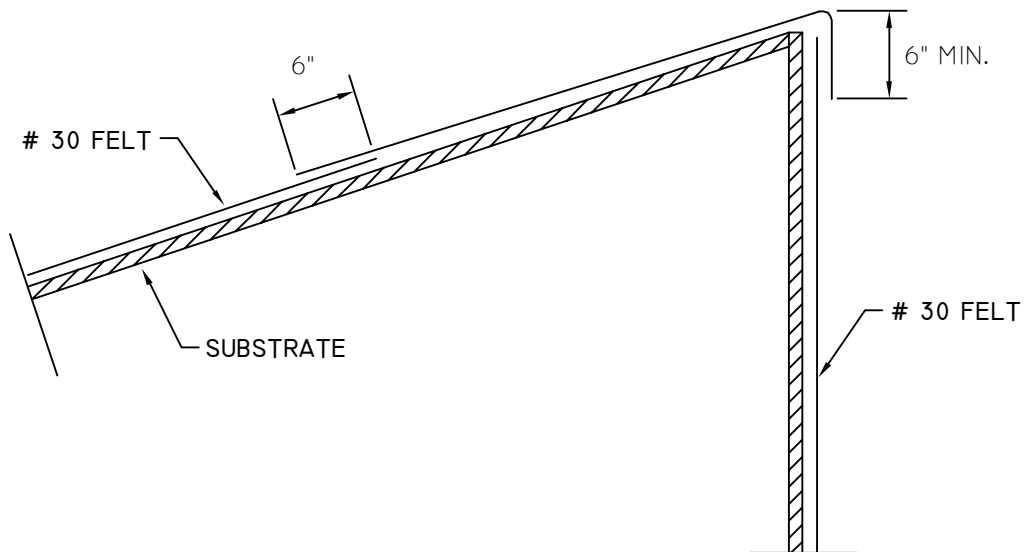
HIGHWALL FELT

PLYWOOD SHEATHING



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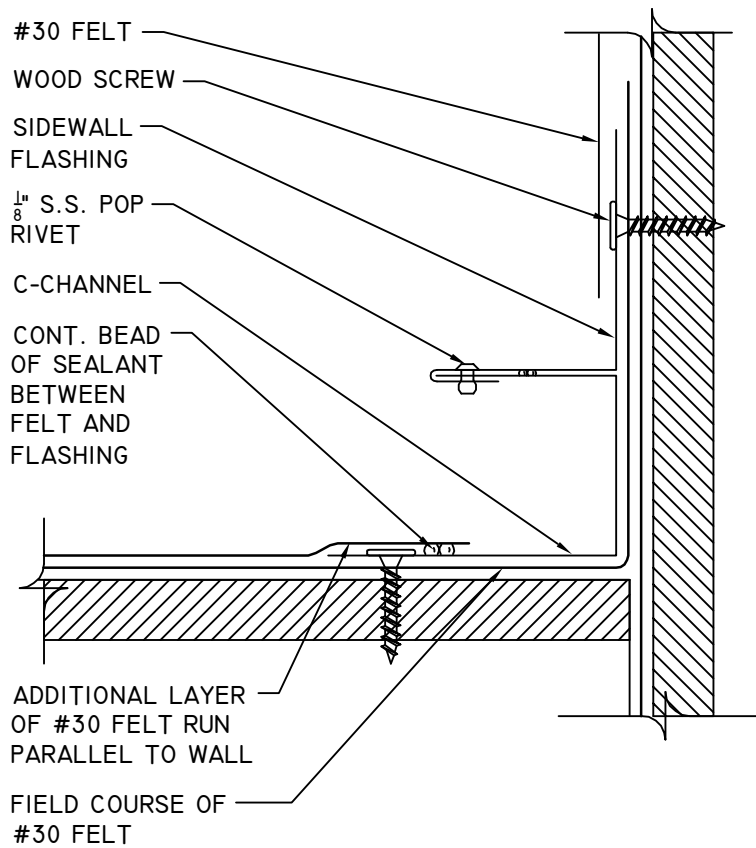
PEAK FELT



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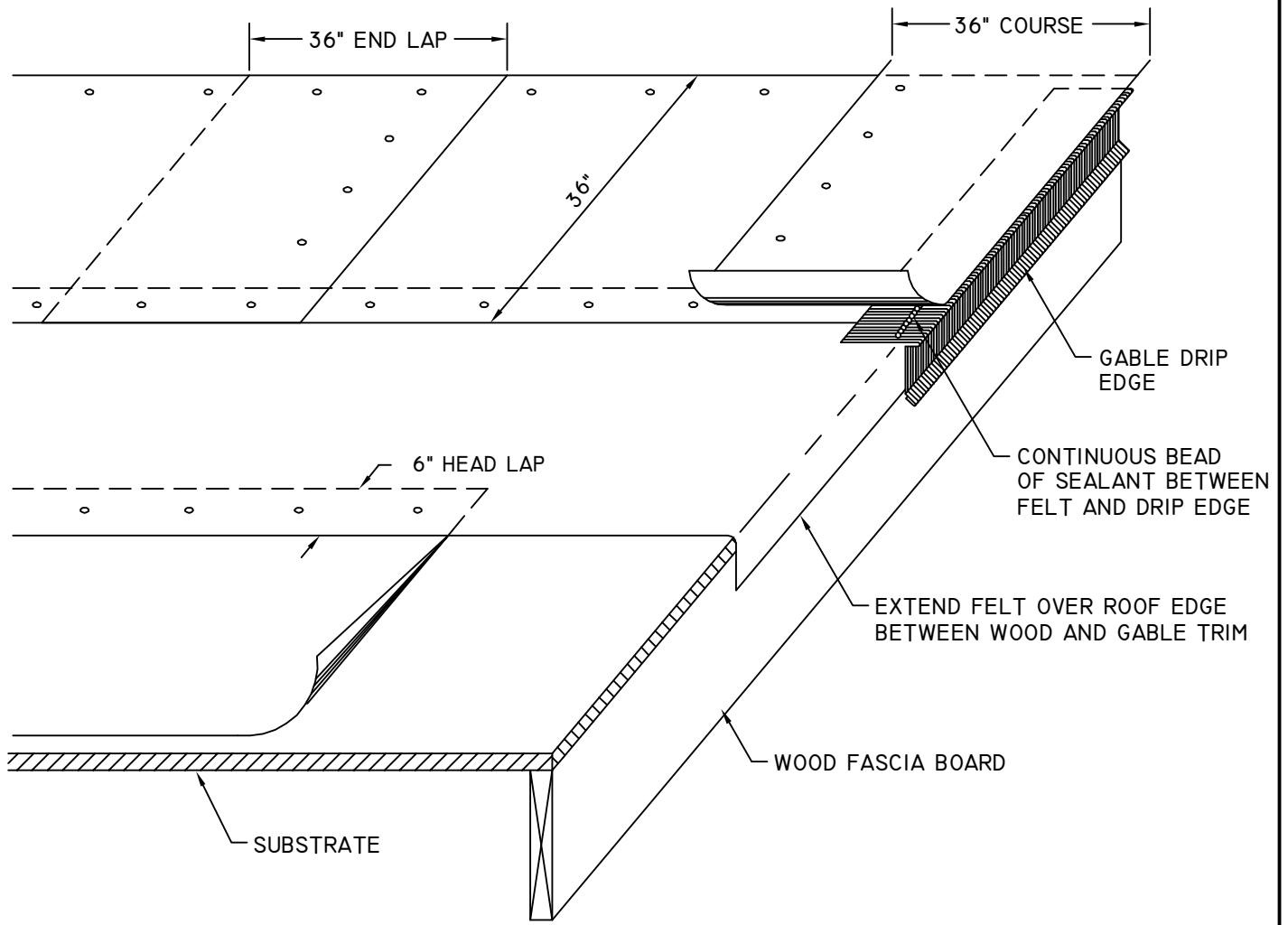
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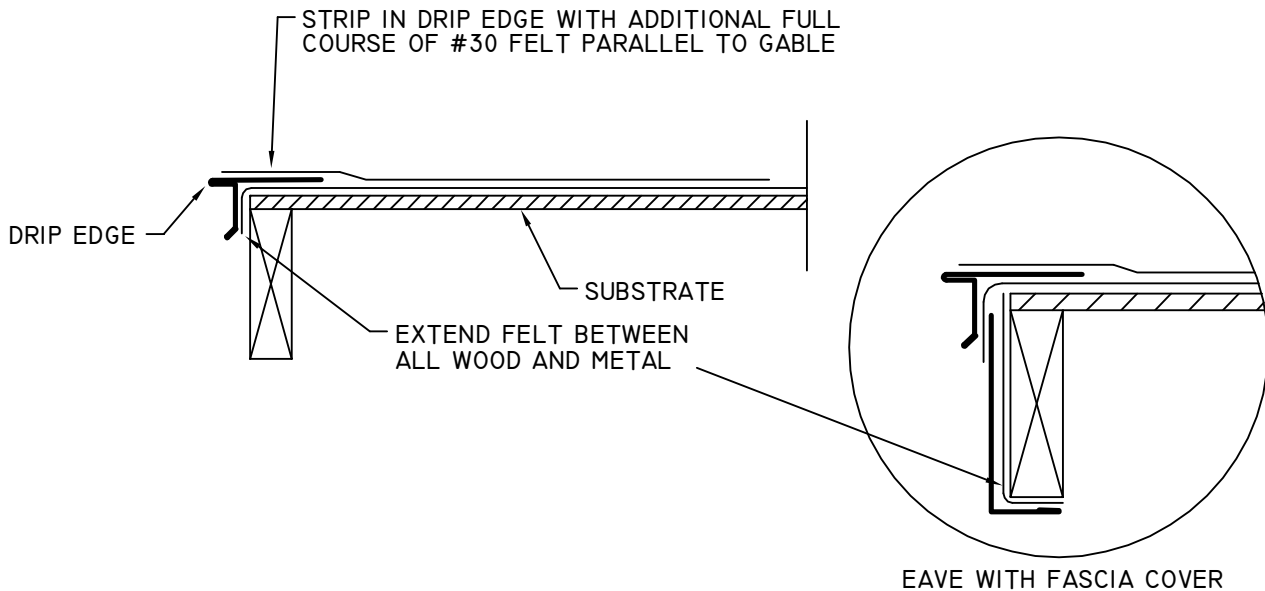
* GRACE ICE & WATER SHIELD OR EQUAL MAY BE USED IN LIEU OF #30 FELT.

GABLE FELT

PLYWOOD SHEATHING



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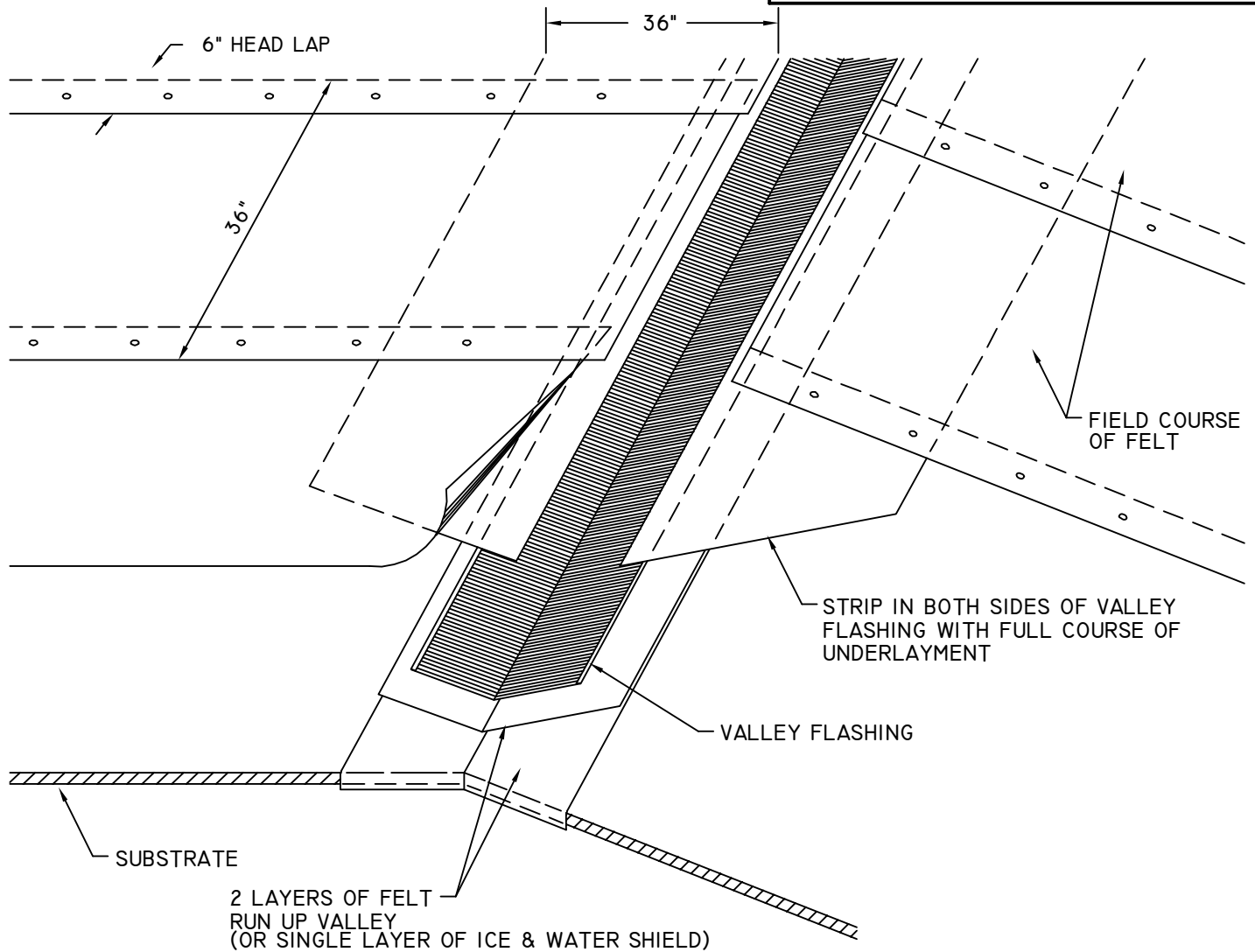
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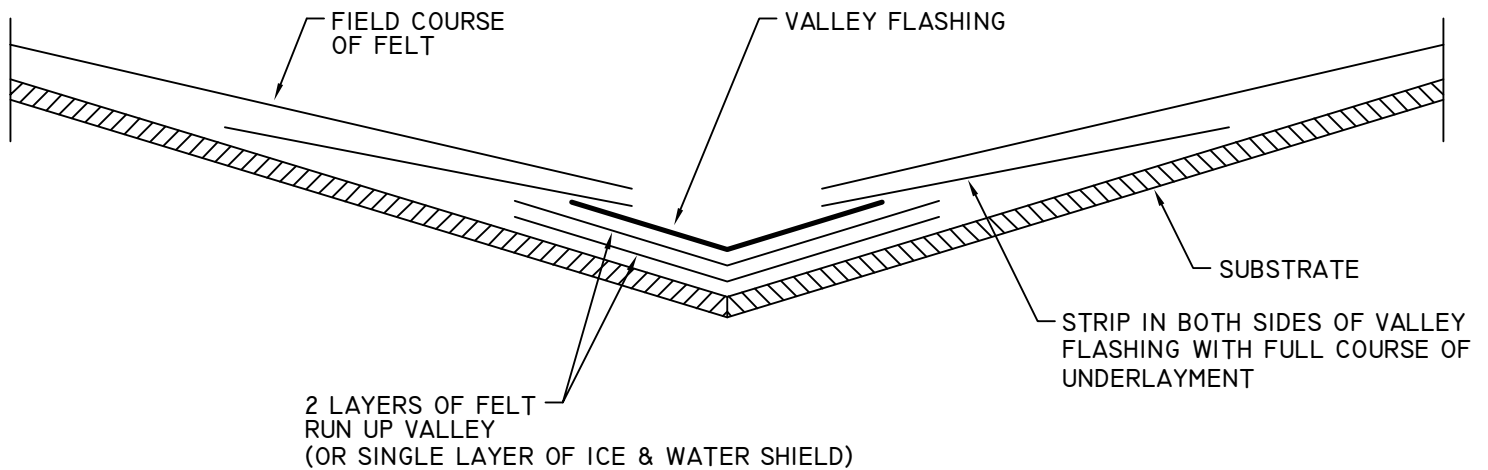
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PLYWOOD SHEATHING

VALLEY FELT



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