

9.2. Counterflashing

Description: Copper flashing is used wherever a wall intersects a roof. Such a system usually consists of copper counterflashing and base flashing in conjunction with roof composition flashing or coping. The counterflashing diverts water to the base flashing, which, in turn, diverts it to the composition flashing. The base flashing is designed to accommodate building movement. It laps the composition flashing at least 4". The composition flashing is extended up a cant strip then up the wall at least 10".

The minimum recommended weight for copper coping and counterflashing is 16 oz.

Special Conditions: Copper counterflashing may be used in conjunction with copper base flashing and composition base flashing for built-up roofing. The copper flashing is used over the base flashing to prevent water penetration behind the composition base flashing.

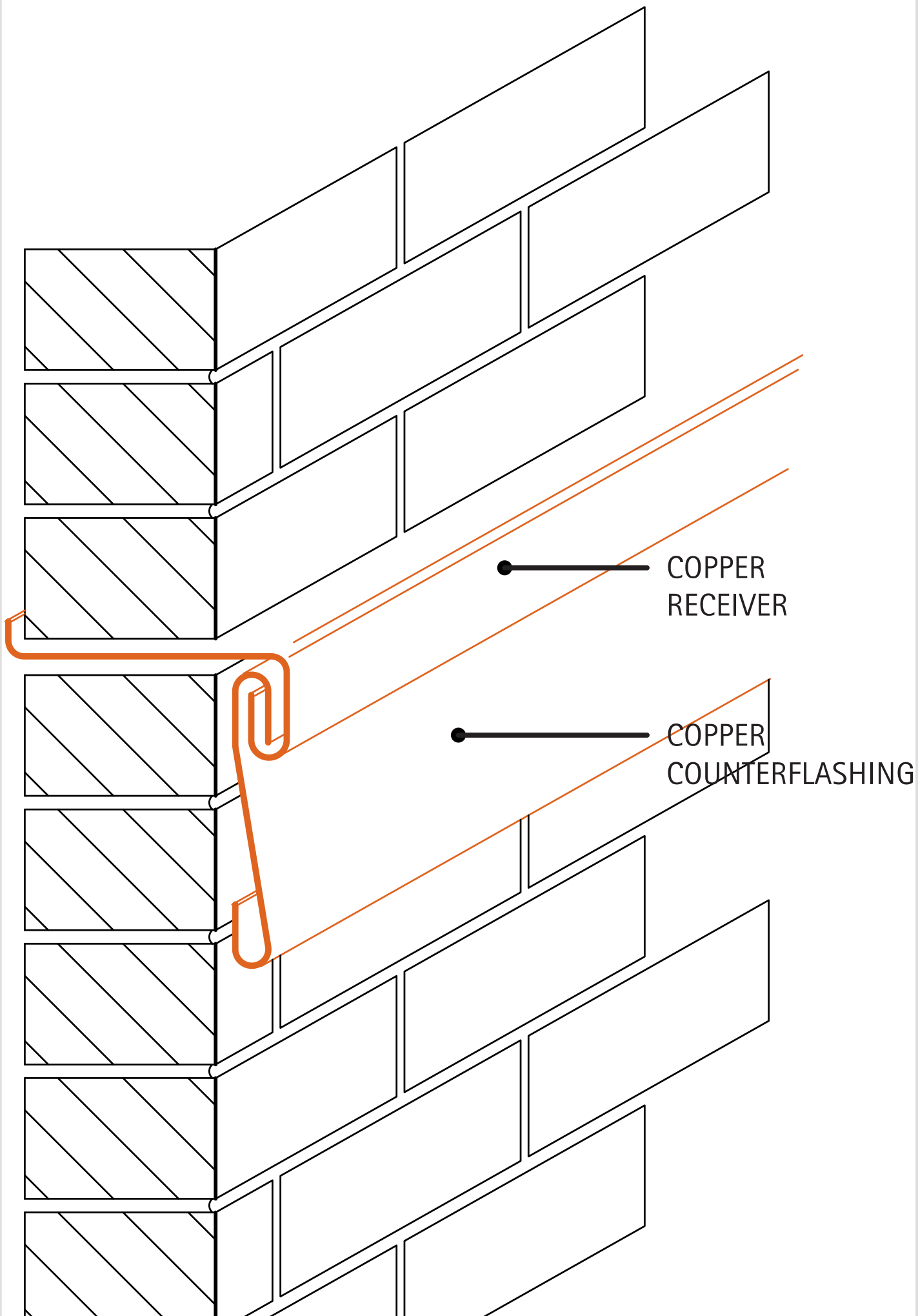
9.2A. Typical Counterflashing Methods

There are many ways to attach and seal copper counter-flashing. Three typical methods are shown.

The first shows a copper receiver which is laid in the mortar joint between two masonry courses. The counterflashing is locked into the exposed edge of the receiver.

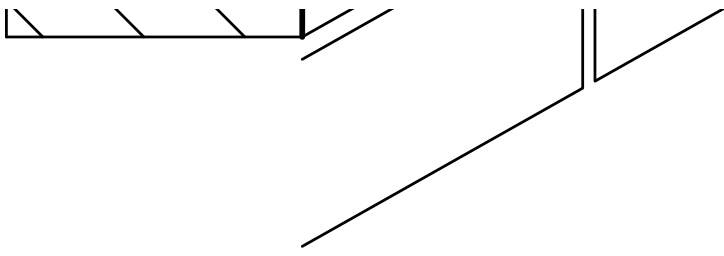


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COPPER
RECEIVER

COPPER
COUNTERFLASHING

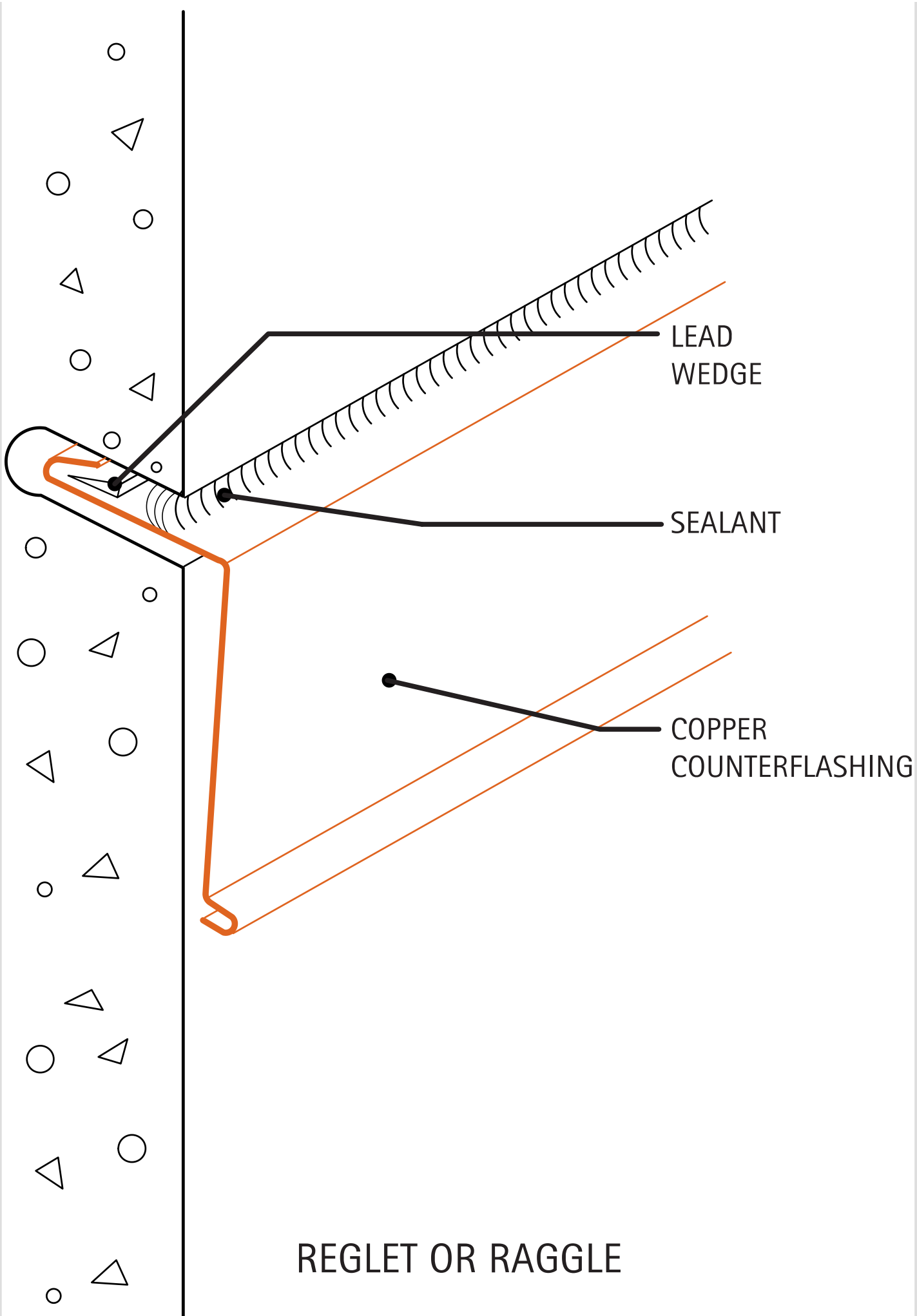


RECEIVER

The second detail shows a reglet (or raggle) cut or cast into concrete. The flashing is inserted into this reglet and held by lead wedges. The reglet is then filled with sealant.



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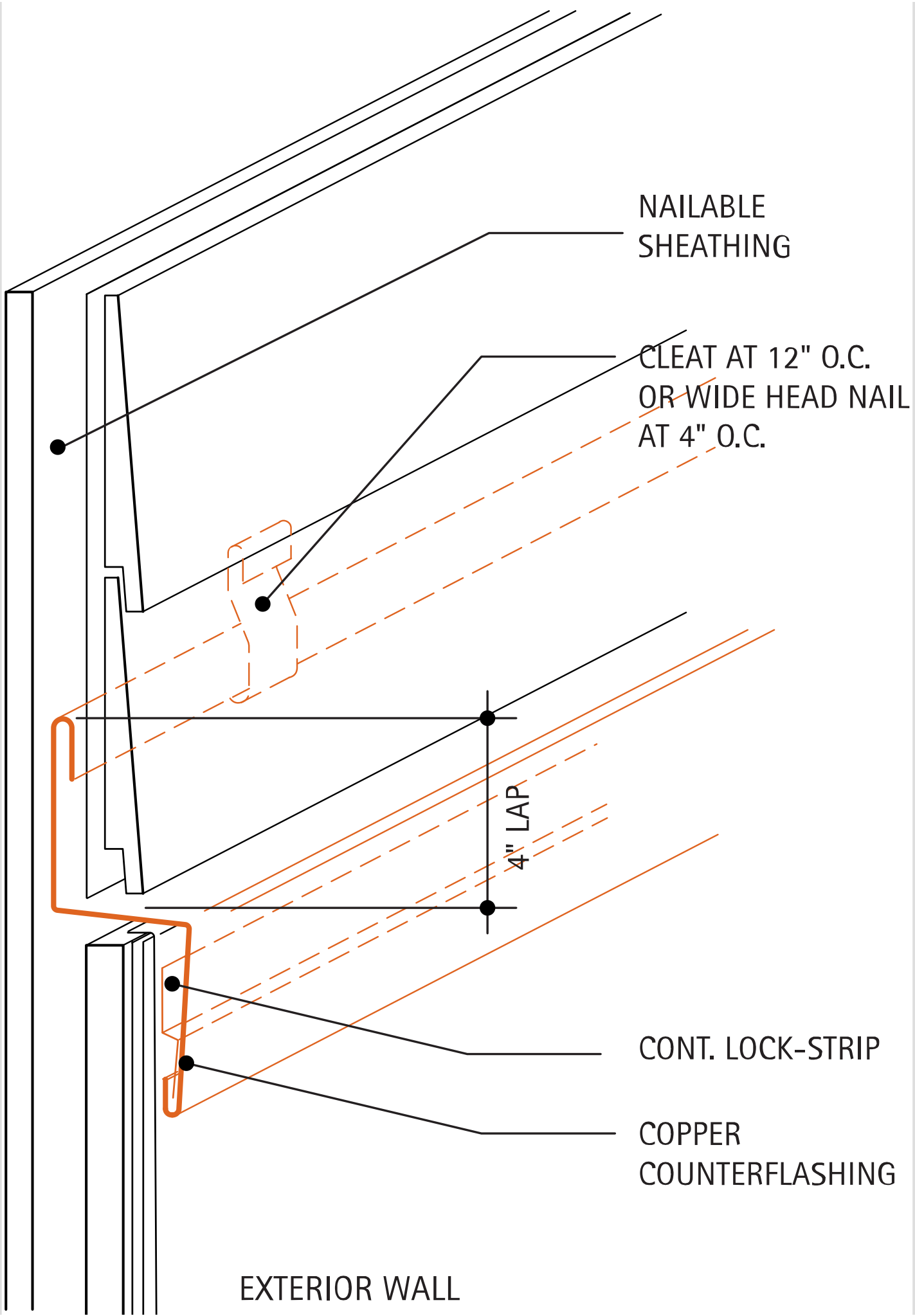




The third type of counterflashing is used for exterior wall coverings of several types. The top edge of the flashing is lapped a minimum of 4" by building paper. It is held to the sheathing by cleats spaced 12" O.C. Wide head nails, spaced 3" O.C., may be used instead of cleats. These nails should not penetrate the flashing. The flashing is simply held by the bottom edge of the wide head.



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NAILABLE SHEATHING

CLEAT AT 12" O.C.
OR WIDE HEAD NAIL
AT 4" O.C.

4" LAP

CONT. LOCK-STRIP

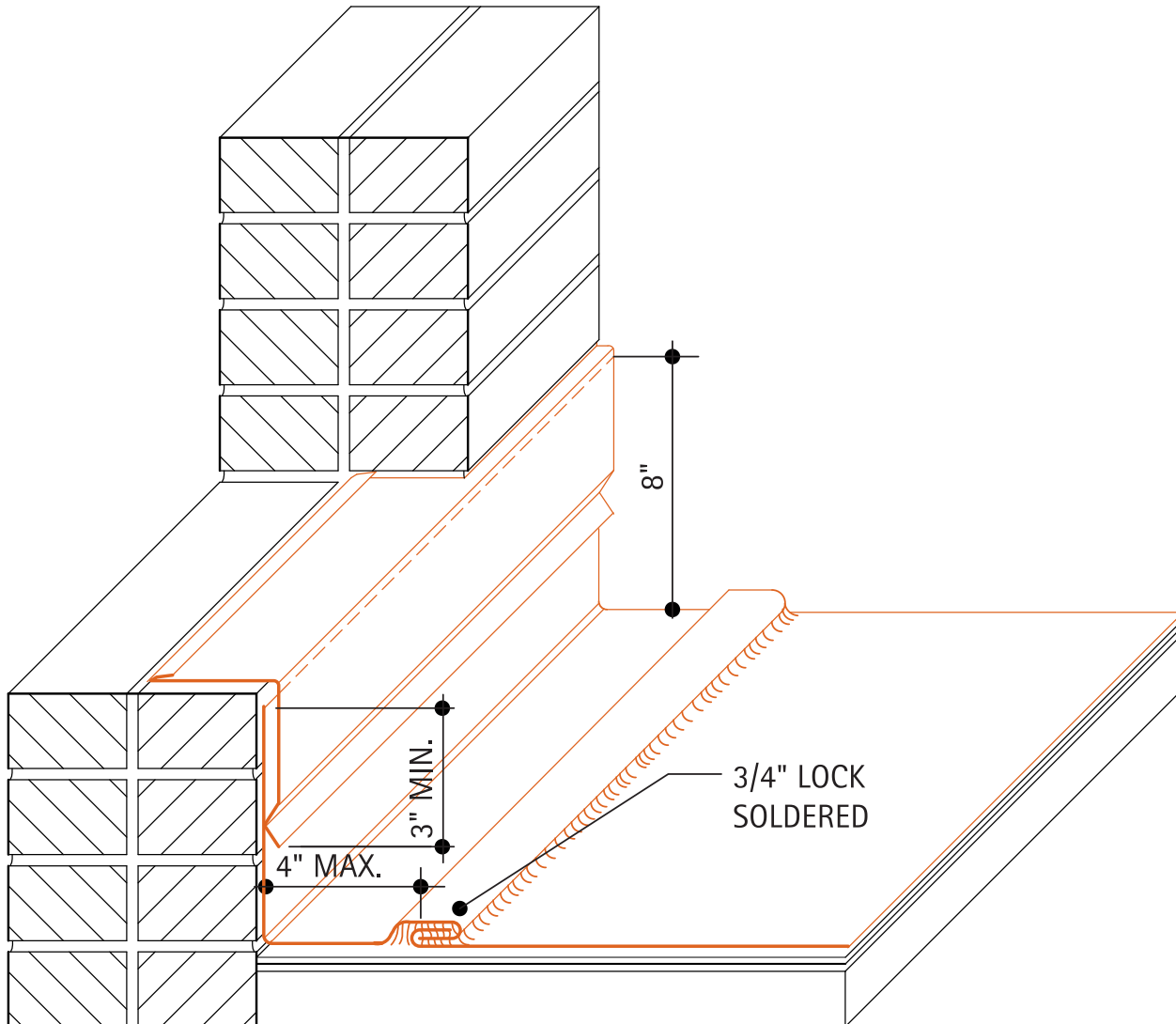
COPPER
COUNTERFLASHING

EXTERIOR WALL

9.2B. Vertical Wall Flashing

This detail shows a flashing condition at a vertical wall or parapet. The roofing squares are locked into a 20 oz. copper base flashing, which extends at least 8" up the wall. The counterflashing laps the base flashing a minimum of 3".

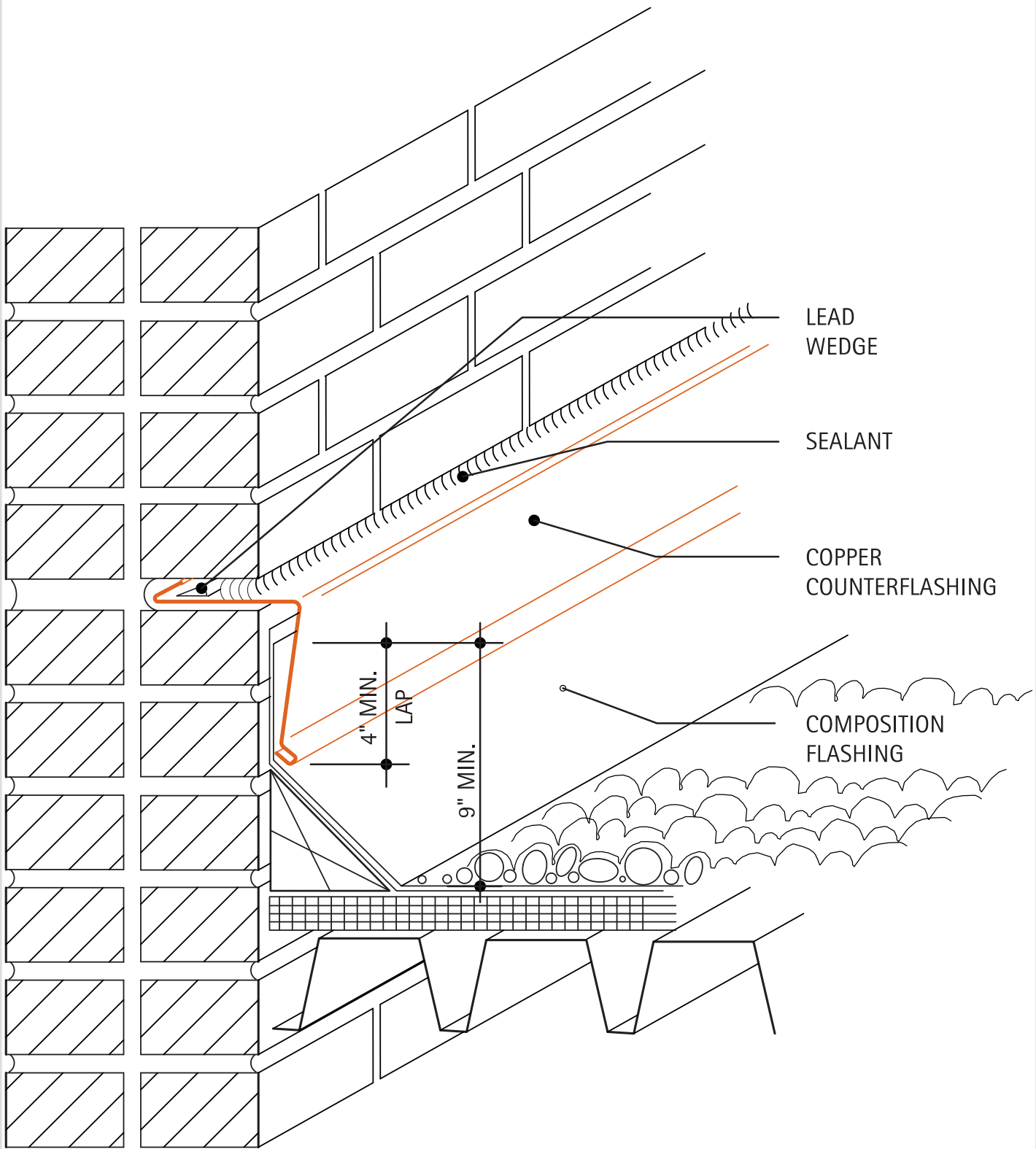
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9.2C. New Flashing in Existing Brick Wall

This detail shows how new copper flashing is installed in an existing brick wall. The mortar joint between brick courses is raked at least 2" deep. This forms a reglet similar to [Detail 9.2A](#). The copper counterflashing is inserted into the reglet and held by lead wedges. The reglet is then filled with sealant.

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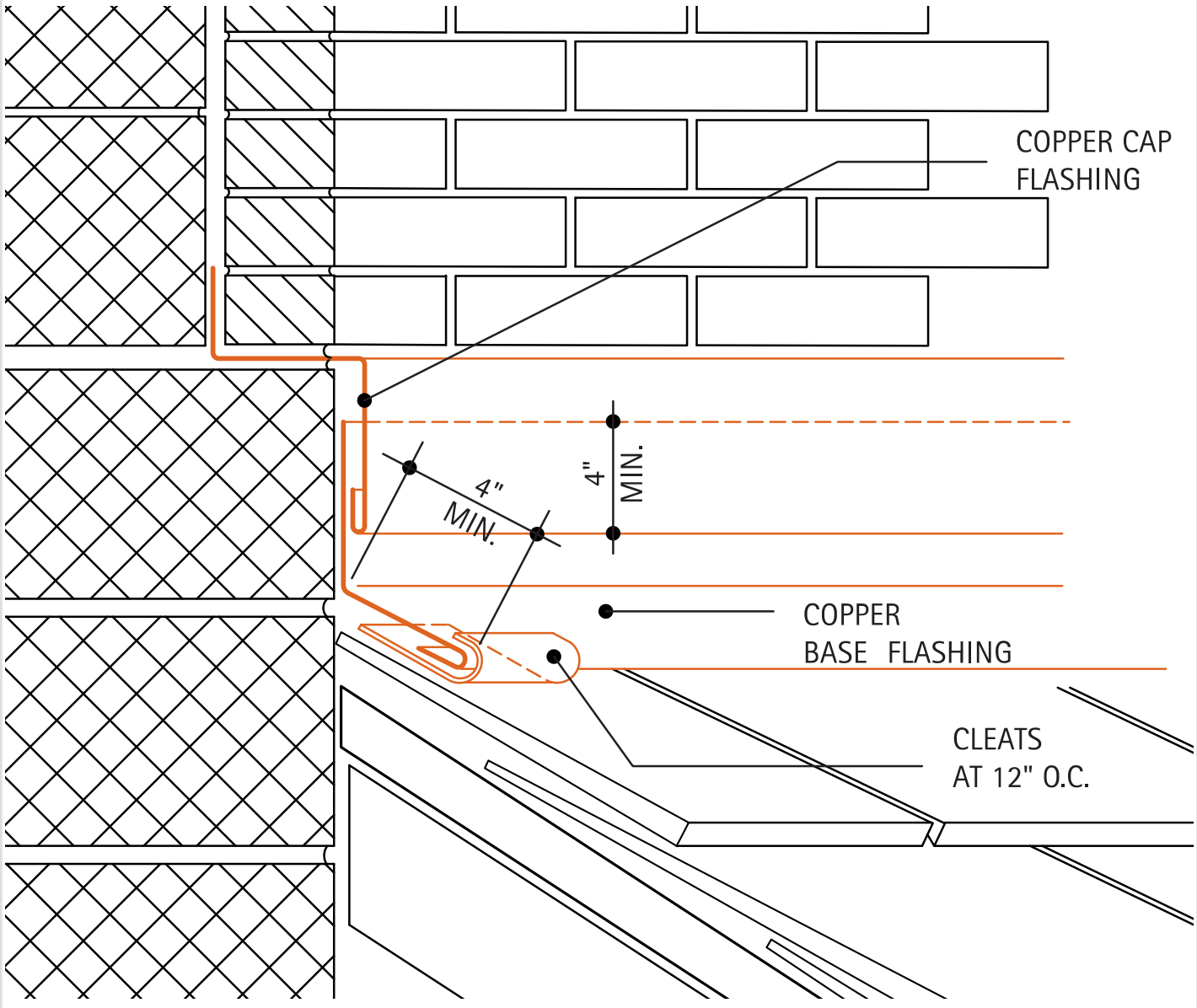
For Additional Information see: [Flashings and Copings - Coping Covers](#), for similar conditions at parapets and copings.

9.2D. Wall Intersection at Shed Roof

This detail shows the use of copper cap flashing extending over copper base flashing at the intersection of a shed roof with a masonry wall. The cap flashing is set in the mortar joint between bricks. The lower edge is hemmed and laps the base flashing and is formed to be a snug fit against the


base flashing. The base flashing is fastened to the roof with cleats spaced a maximum of 12" apart. The base flashing laps the roof a minimum of 4".

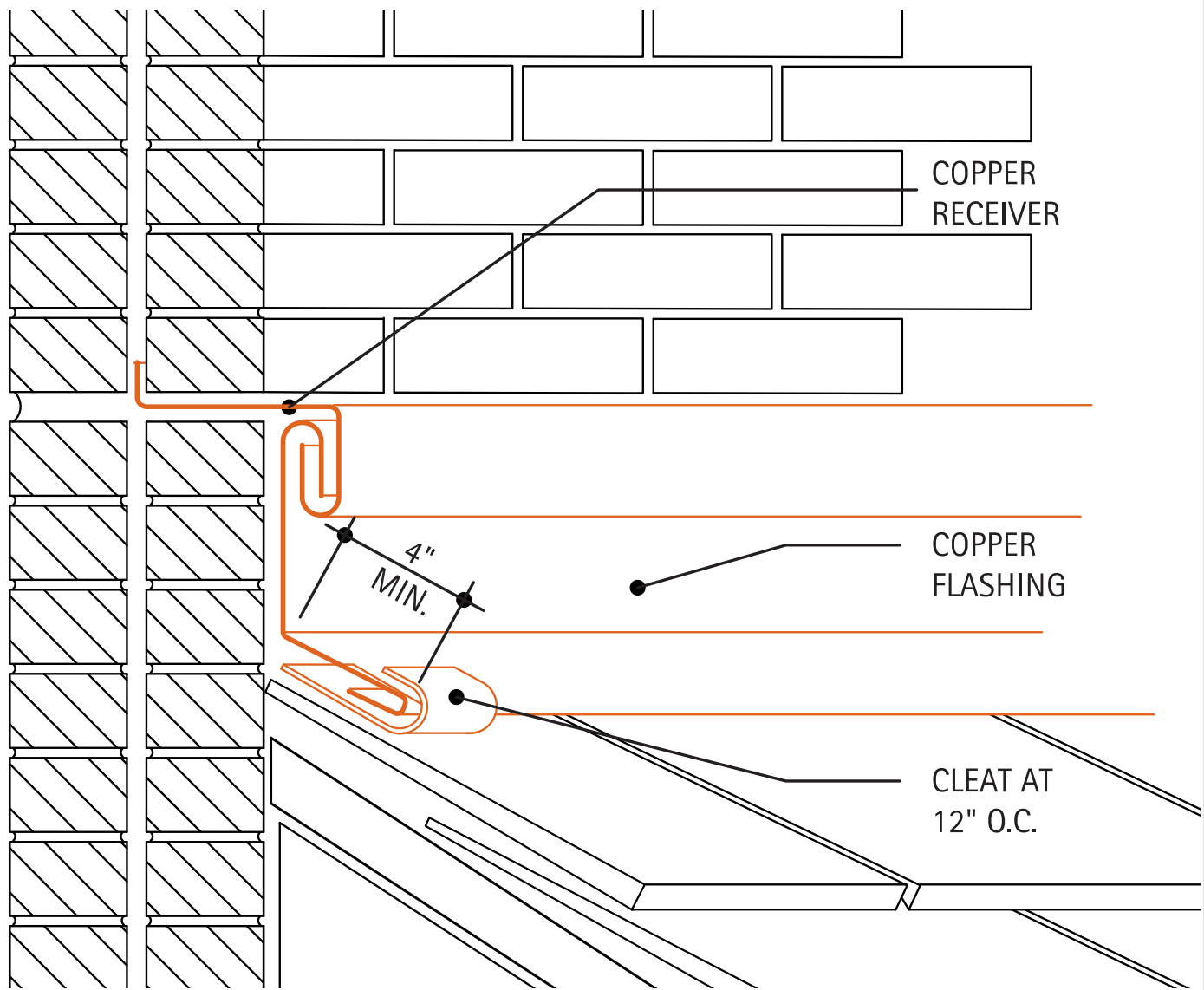
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9.2E. Shed Roof - Alternate

This detail shows an alternate flashing method for the condition in [Detail A](#). The difference is that a copper receiver holds the top edge of the flashing.

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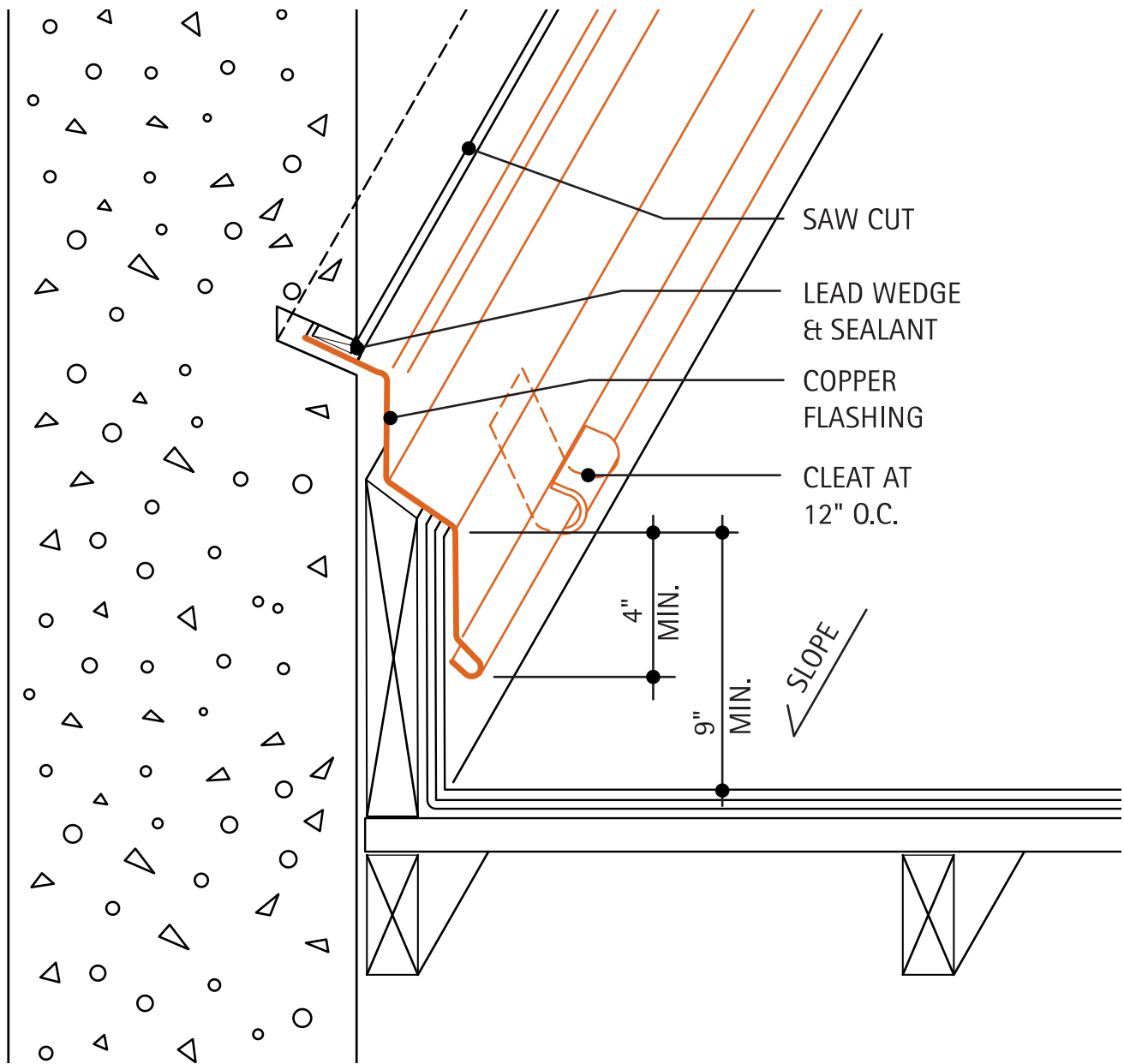


9.2F. Wall Intersection Along Sloped Roof

This detail illustrates the use of a saw cut to hold the flashing with the aid of lead wedges. The cut is filled with sealant. One of the difficulties using this method is dealing with end conditions, such as inside corners. The lower end of the flashing is hemmed and held by cleats at 12" O.C. max.



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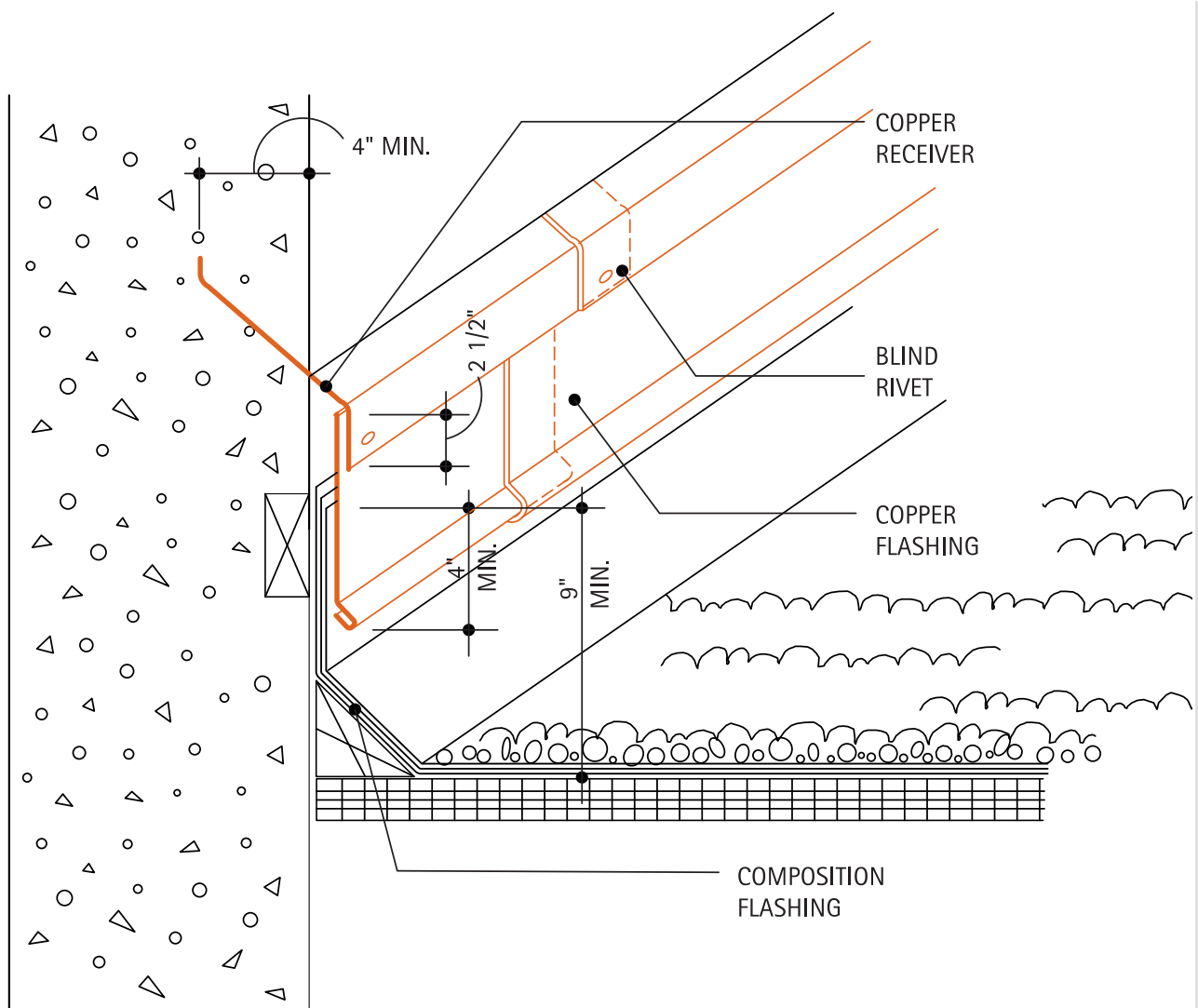


9.2G. Copper Receiver Cast in Concrete Wall

Another method of flashing a concrete wall is to cast the cap flashing into the wall. The cap flashing is attached to the base flashing by blind riveting. An alternate base flashing fastening method is to use cleats spaced at 12" O.C. This detail can be used on either a sloped or a flat roof.



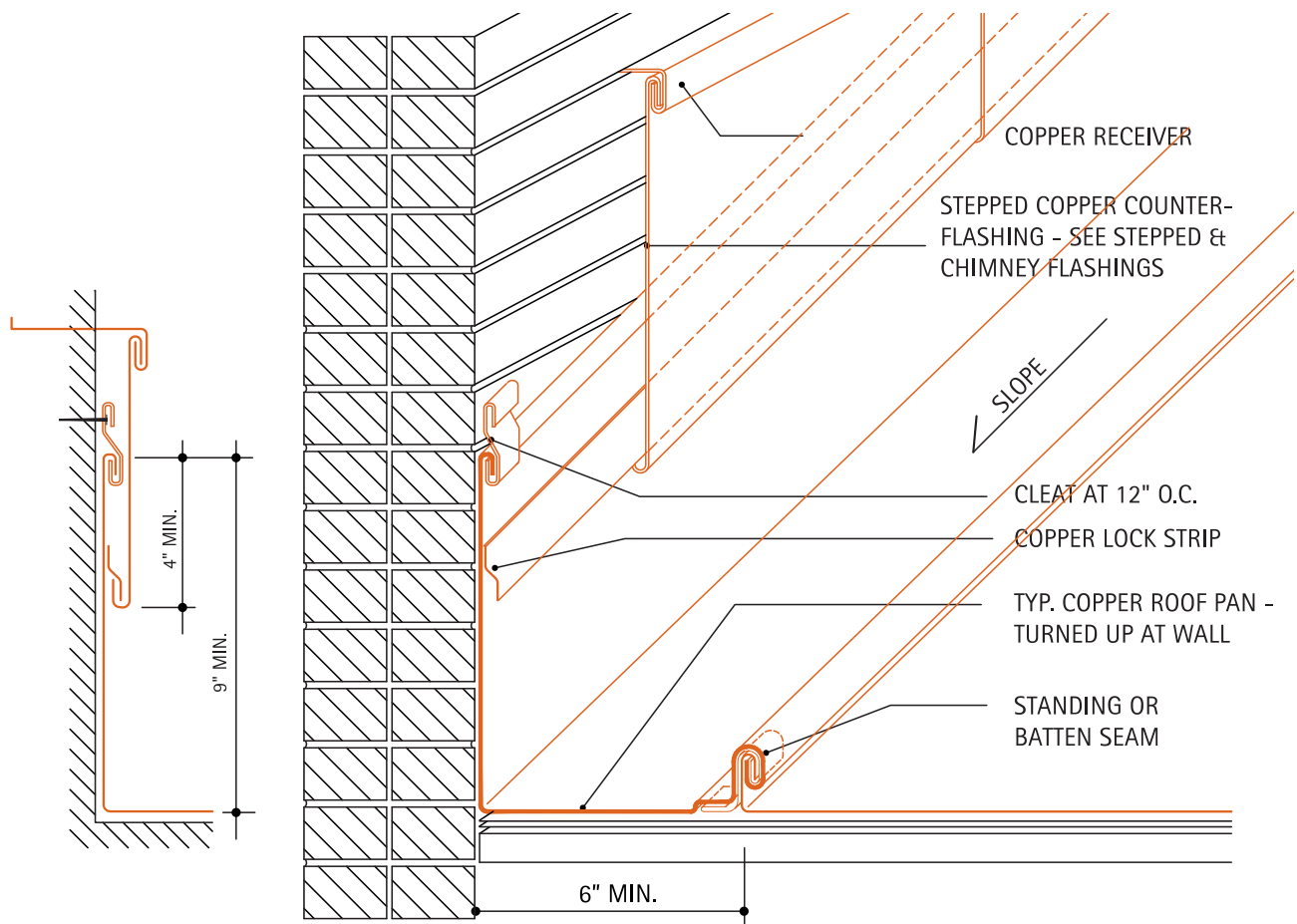
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9.2H. Pitched Copper Roof Parallel to Wall

This detail can be used for both standing and batten seam roofs. The copper roofing pans are turned up on the vertical wall to form a base flashing extending at least 9" up the wall where they are cleated. Copper flashing, held by a receiver at the top, is locked into a locking strip soldered to the base flashing. The counterflashing overlaps the base flashing by at least 4".

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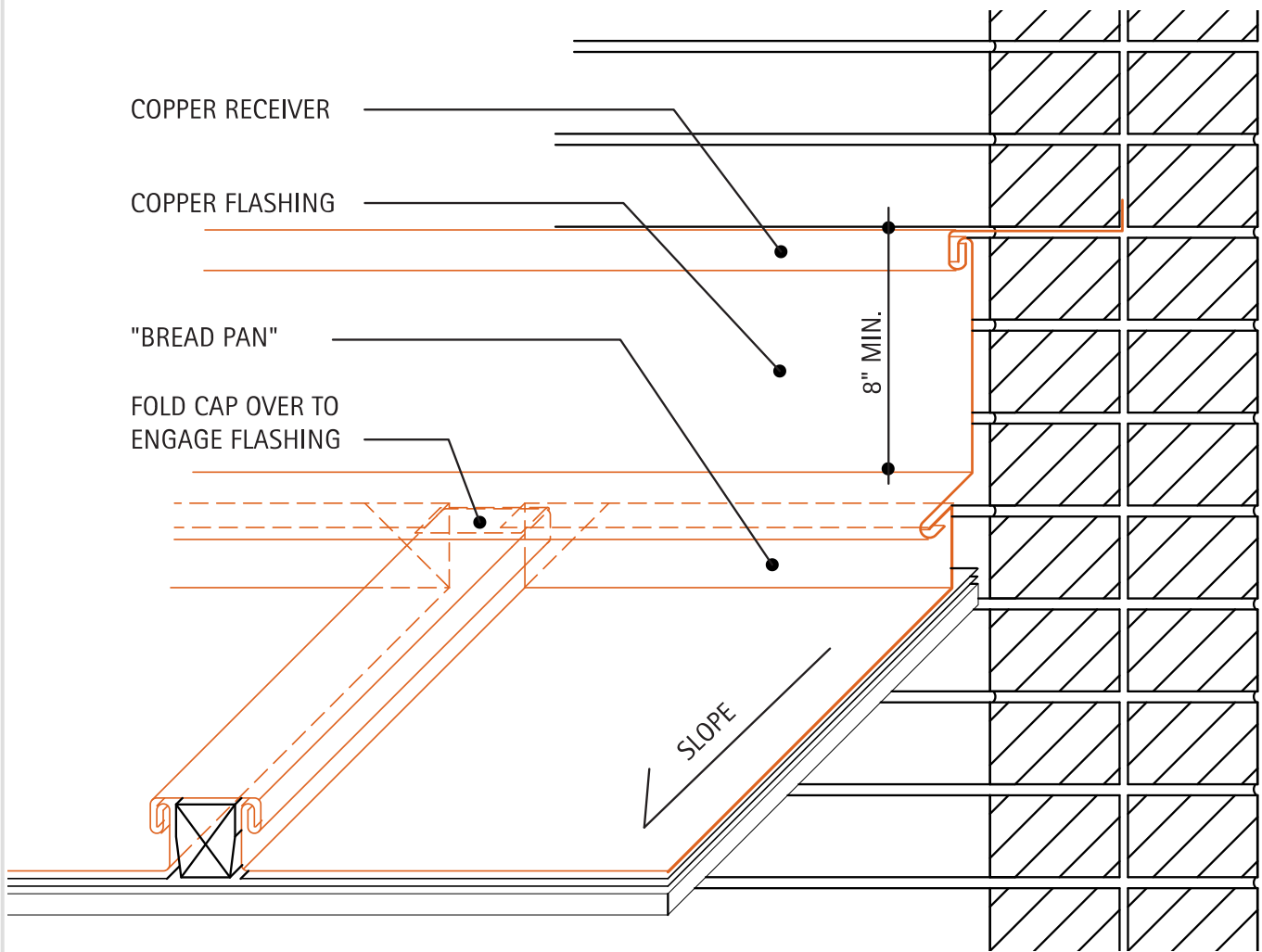


9.2I. Batten Seam Roof at Wall

The flashing of the head of a batten seam roof at a wall is shown in this detail. The top of the roof pan is formed into a "bread pan" whose upper edge is just above the finished batten. Copper flashing is locked into this edge, and extends at least 8" up the wall. A copper receiver holds the counterflashing at its top edge.



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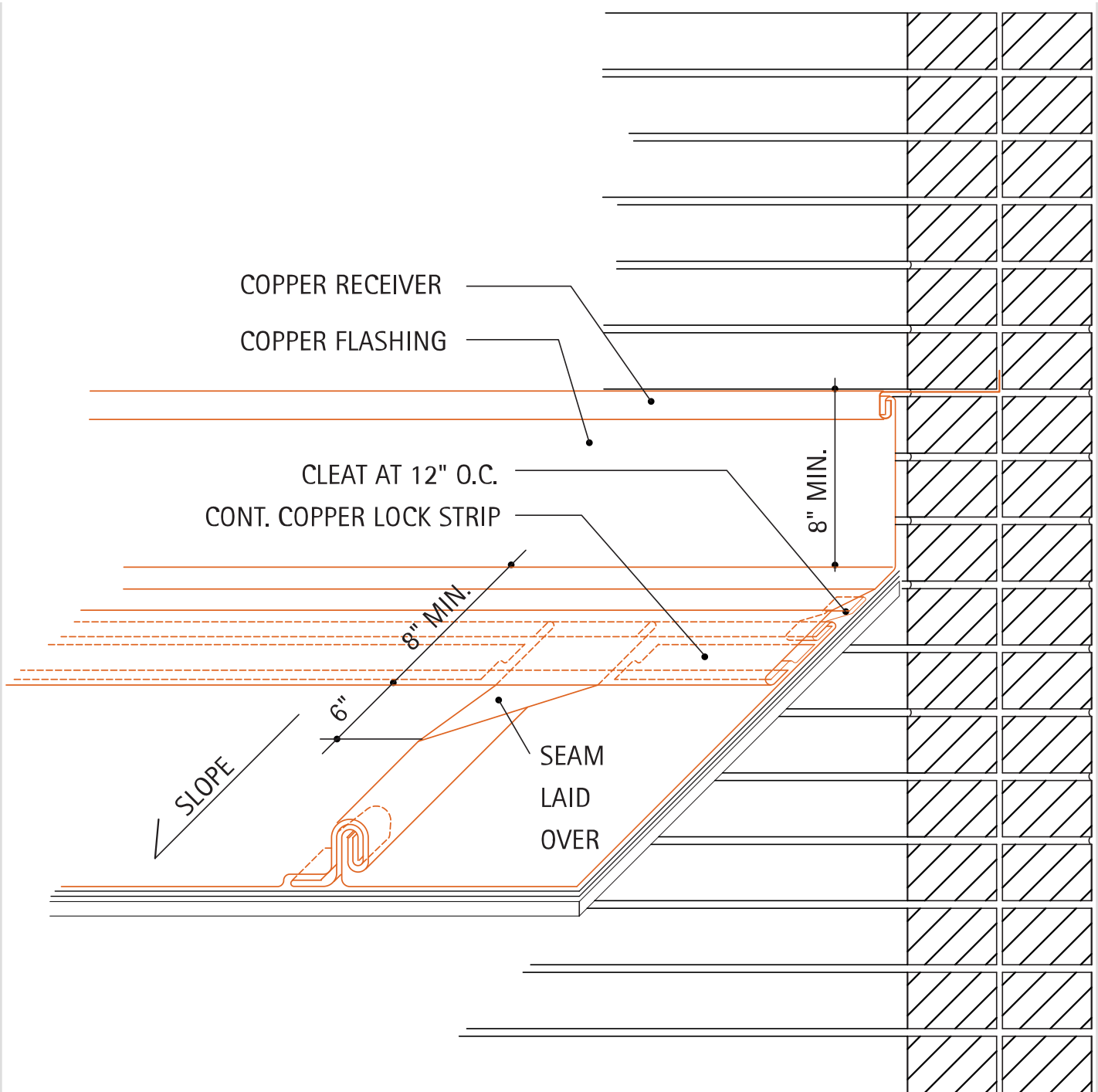


9.2J.Standing Seam Roof at Wall

The detail shows the method of flashing the head of a standing seam shed roof. The standing seams are laid flat 8" from the vertical wall, folded 3/4" and secured with copper cleats spaced 12" O.C. Copper locking strips of the same weight as the flashing are soldered to the pans between seams at least 6" from the wall and engage the base flashing in a 3/4" lock. Copper base flashing extends at least 8" up the wall to a copper receiver.



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"Bread-Pan" construction details similar to [Detail 9.2l](#) can also be used.

For Additional Information:

- [Flashing and Copings - Stepped and Chimney Flashing](#), for information on stepped flashing methods.
- [Roofing Systems - Standing Seam](#) or [Batten Seam](#), for information on the respective roofing types.
- [Roofing Systems - Long Pan](#), for details and requirements on pans over 10 feet in length.