

9.8. Stepped and Chimney Flashings

Description: Stepped flashing is used where a sloped roof meets a masonry wall. A typical occurrence is where a brick chimney rises above a roof. The details shown concentrate on such chimney flashings, but apply to other wall conditions.

There are two approaches to stepped flashings. One type uses pieces of copper base flashing installed with each course of shingles. The upper edge of each flashing piece extends 2" above each course of shingles. The lower edge is held 1/2" above the butts of the succeeding course. The base flashing extends a minimum of 4" up the wall and onto the roof. The one piece cap flashing is inserted into a reglet and held by lead wedges. The reglet is filled with sealant. The length of each piece of cap flashing varies with the pitch of the roof; no step should be more than 3 bricks high. The width also varies but should always be wide enough to cover 4" of the base flashing.

The second type uses a single copper runner under the shingles, tile or slate. This type is attached before the roofing material is installed. The roof portion of this runner flashing has a hooked edge and is cleated at 12" O.C. The base flashing is extended up the wall a minimum of 8". This requires the cap flashing to be in two pieces, a receiver and a counterflashing.

If the chimney straddles the ridge of the roof, this stepped flashing is used on the two sloped sides. The lower sides are flashed with a copper apron that covers the next course of shingles.

If the chimney is entirely on one side of the ridge, a copper cricket must be used on the high side to divert the water to either sloped side.

Apron and cap flashing should be of at least 16 oz. Base flashing for shingles can also be 16 oz., but for slate or tile roofs 20 oz. is recommended.

The apron joint with the base sheets is soldered horizontally and vertically.

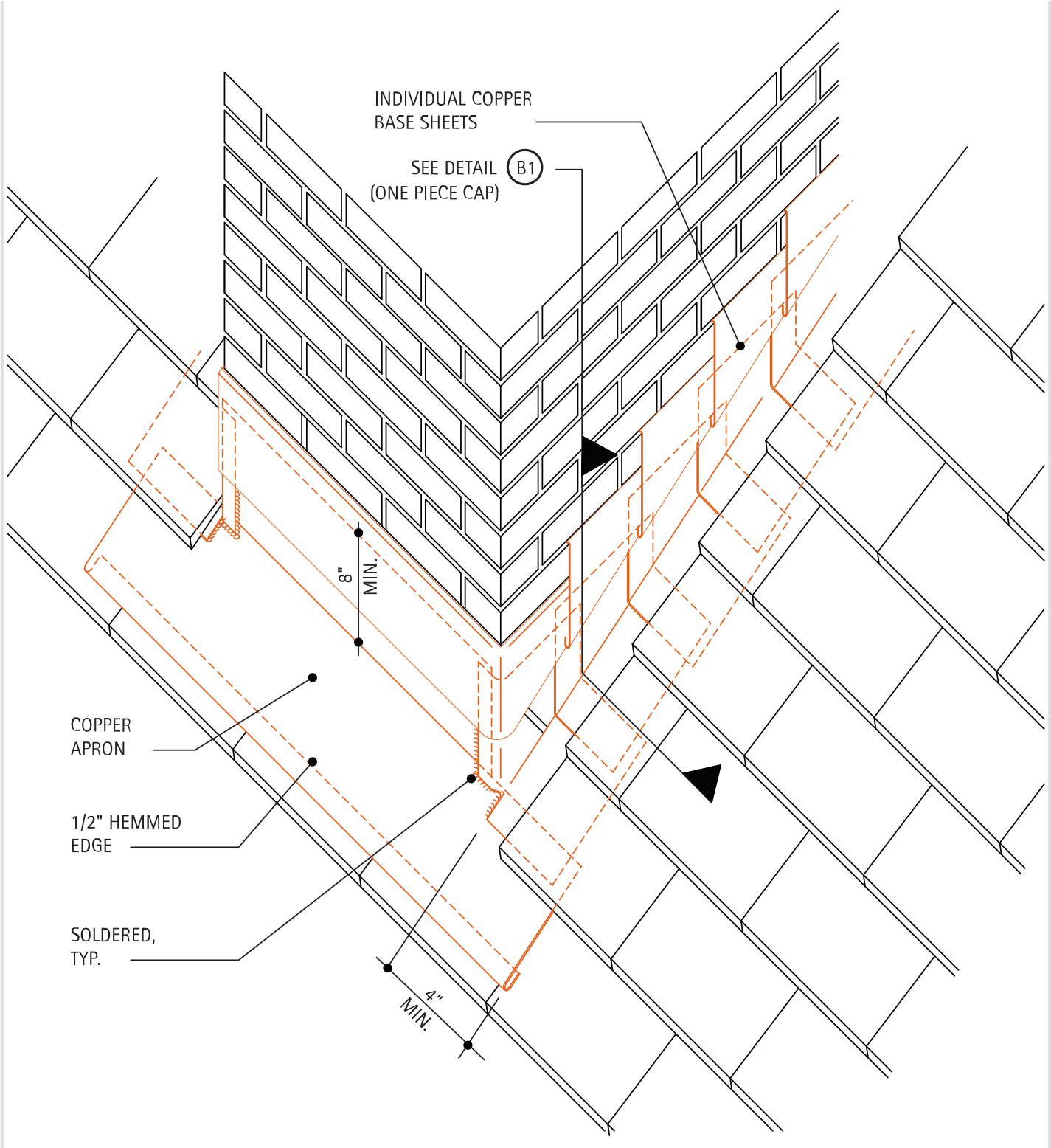
The minimum weight for the cap and base flashing used at chimneys and other stepped flashing conditions is 16 oz. Crickets should also be formed from 16 oz. copper.

9.8A. Flashing at Base of Chimney

This detail shows a typical installation using individual copper base sheets, as described above.



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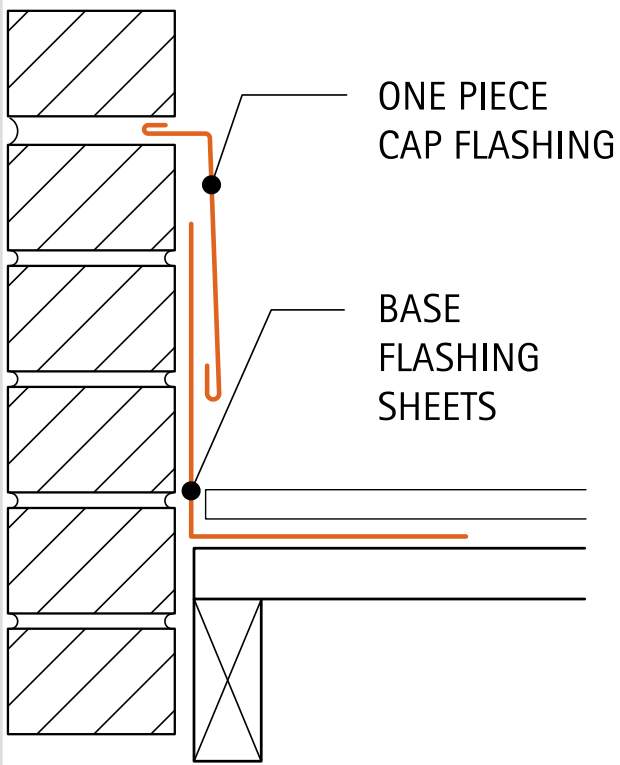


9.8B. Alternate Step Flashing Methods

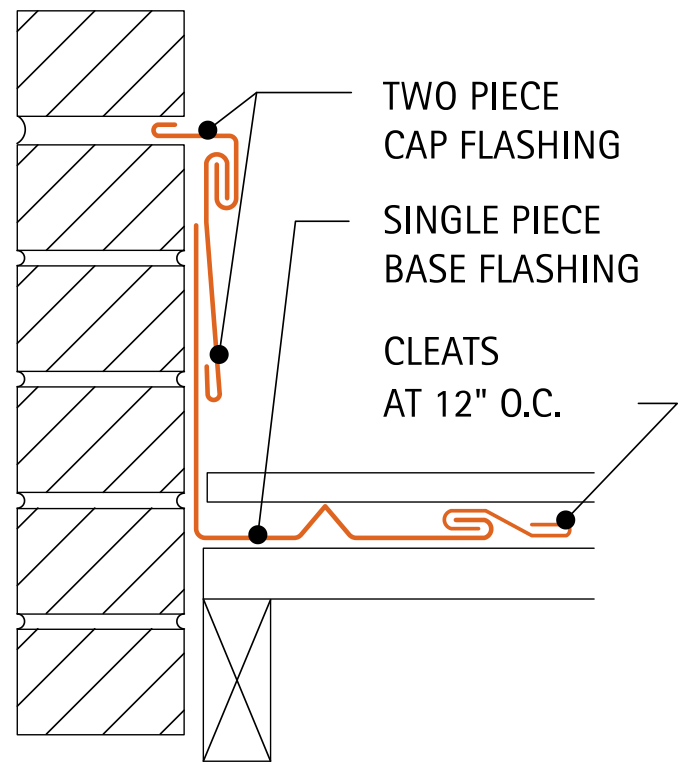
These sections illustrate two methods of stepped flashing. The one on the left uses individual copper base flashing sheets, and a one-piece cap. The other one uses the single piece base flashing with a two-piece cap flashing. Note the hooked edge on the base flashing to prevent water from running under the roofing material. The water is conducted instead to the end of the base flashing, over the apron, and onto the roof below.



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1. ONE PIECE CAP

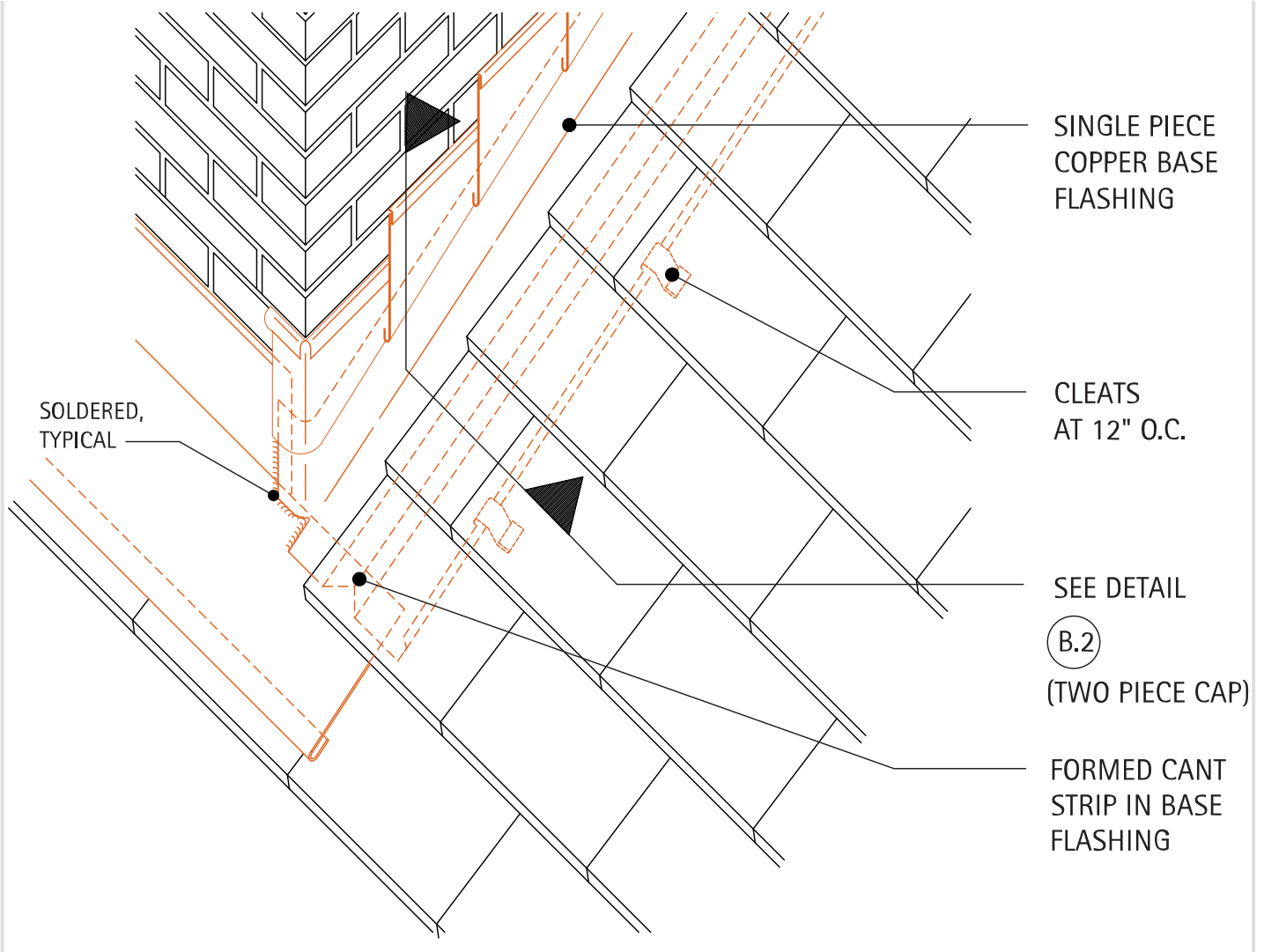


2. TWO PIECE CAP

9.8C. Chimney Flashing - Alternate

This detail shows a second method of stepped flashing as described above.

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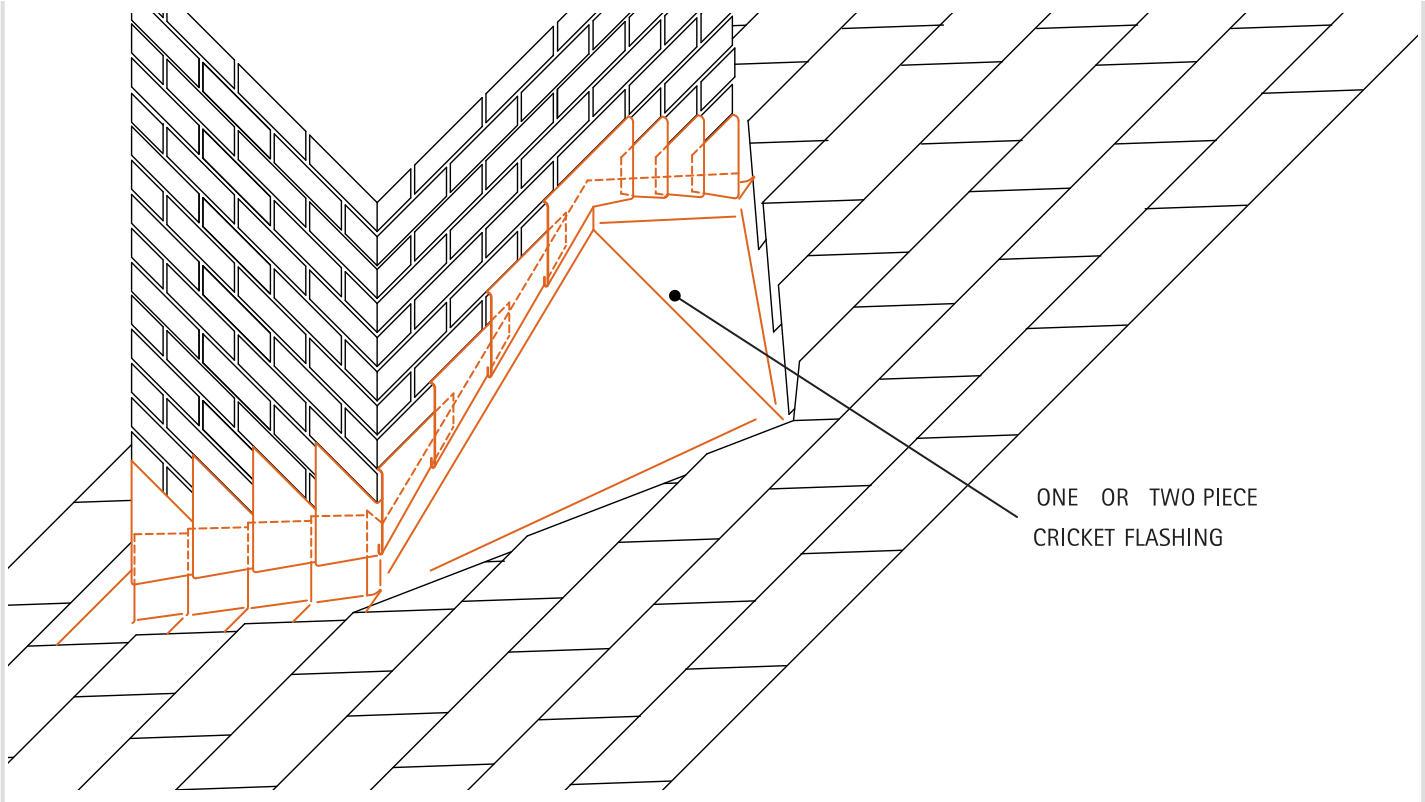


9.8D. Chimney Cricket Flashing

This detail illustrates the use of a cricket to divert water above the chimney to either side. The cricket can be a one piece design or a two piece, joined by a standing seam at its ridge.



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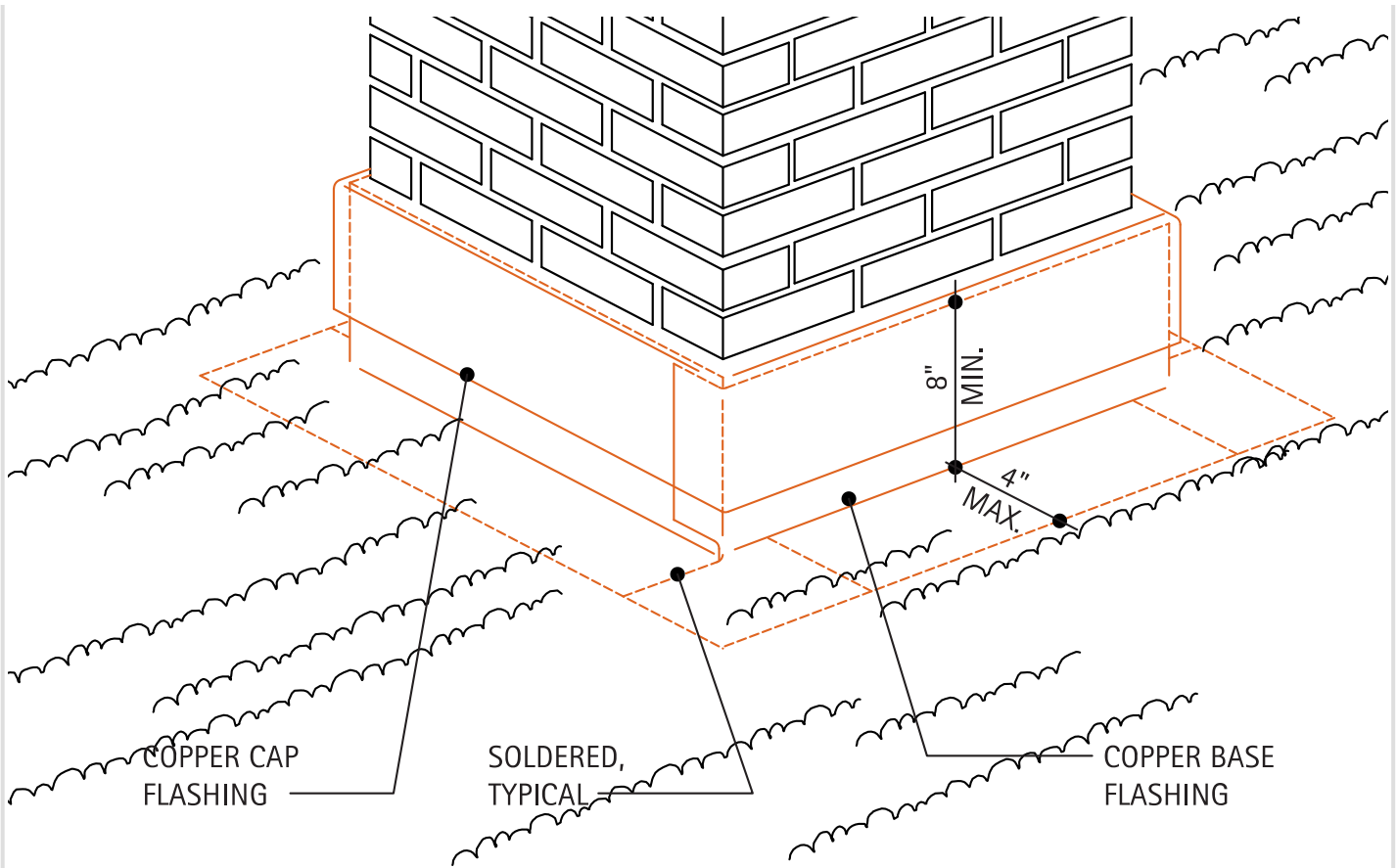


9.8E. Chimney Flashing - Flat Roof

Copper base flashing is attached to the roof deck before installation of the roofing. It extends at least 8" up the wall and at least 4" onto the roof, on all sides of the chimney. Copper cap flashing then covers the upper edge.



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All joints between base flashing sheets are soldered.

For Additional Information:

- [Flashings and Copings - Counterflashing](#)

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