

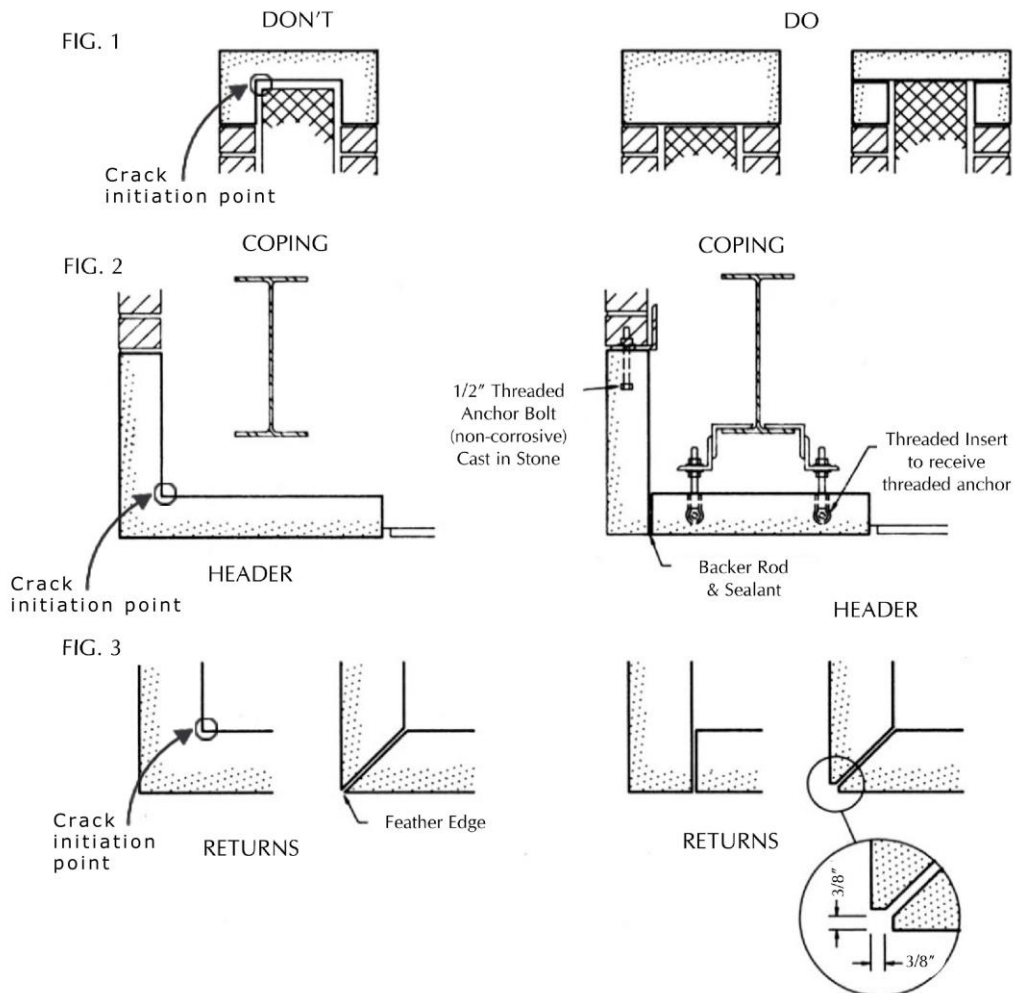
“L” SHAPES, “U” SHAPES AND FEATHER EDGES

Moulds for manufacturing Cast Stone can be made from a wide variety of materials. The product is cast using either the Vibrant Dry Tamp or wet cast system. Regardless of the process used, a knowledge of the fundamentals of casting can benefit the building budget tremendously.

Nearly all shapes are cast face down in the mould. The mould creates five formed sides and one unformed back side. For maximum economy, the unformed side should be kept flat and left unexposed. L or U shape stones present casting problems and should be avoided whenever possible.

The coping section shown in Fig. 1 will cost more than either of the alternative sections shown due to more labor intense moulding, manufacturing, shipping and setting operations. Fig. 2 shows a header with a long vertical leg which will prohibit multiple daily castings when using the Vibrant Dry Tamp process and cause air voids in the wet cast process. Considerably less product could be packaged on a truckload using either method.

Fig. 3 illustrated the two best corner conditions; the butt joint and the quirk joint. The flat on a quirk must accommodate the largest aggregate used in the mix.



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The Cast Stone Institute (CSI) is a not-for-profit organization created to advance the design, manufacture and use of Architectural Cast Stone. To further this goal, the CSI continually disseminates information to targeted construction industry audiences through presentations, programs and technical publications.

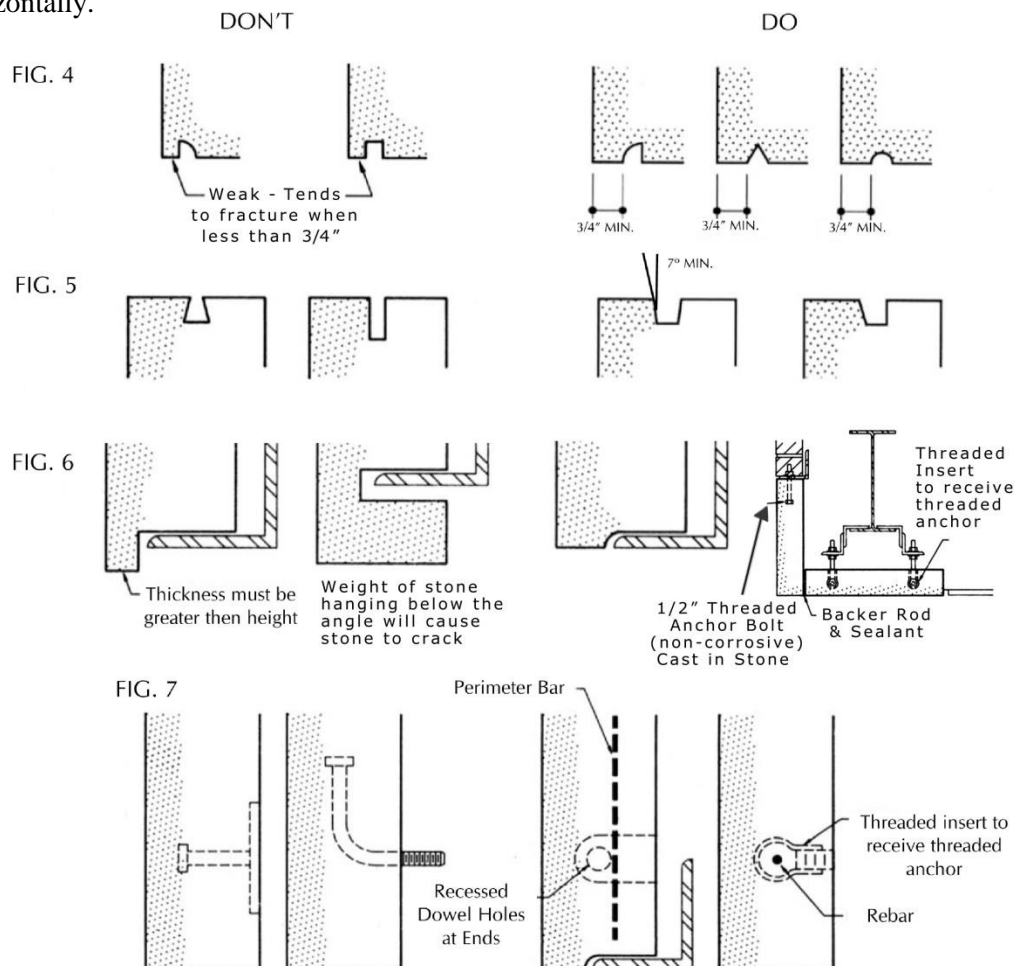
DRIPS, REGLETS & SUPPORT SYSTEMS

Deep drips or drips with no draft serve no better purpose than the three drips shown in Fig. 4. Frail drips can shear the edge of the stone when subjected to freezing rain. When using the quarter round type drip, build enough projection into the design to allow a 1" extension beyond the drip. The "V" and half round types are simpler to manufacture, can be placed closer to the edge, work just as well and can endure more abuse.

Seven (7) degrees minimum draft on formed flashing and anchor slots is required in order to ensure crisp, straight grooves. Metal reglets can be cast into the formed sides of stones when structural reasons dictate that a dovetails be used (Fig. 5).

Relieving angles are by far the most economical method of supporting Cast Stone. Round or bar stock can be welded to the angle to receive anchor slots in the stone as shown in Fig. 6. Narrow noses used to disguise angles are subject to breakage during handling and are difficult to repair.

Avoid weld plates and bolts projecting from the backs of stones (Fig. 7). Dowel holes in ends can be used for alignment and for tying back through eyebolts connected to the backup. Threaded inserts are more costly and must be pinpointed both vertically and horizontally.



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DRAFT, SUPPORT SYSTEMS & RADIUS PIECES

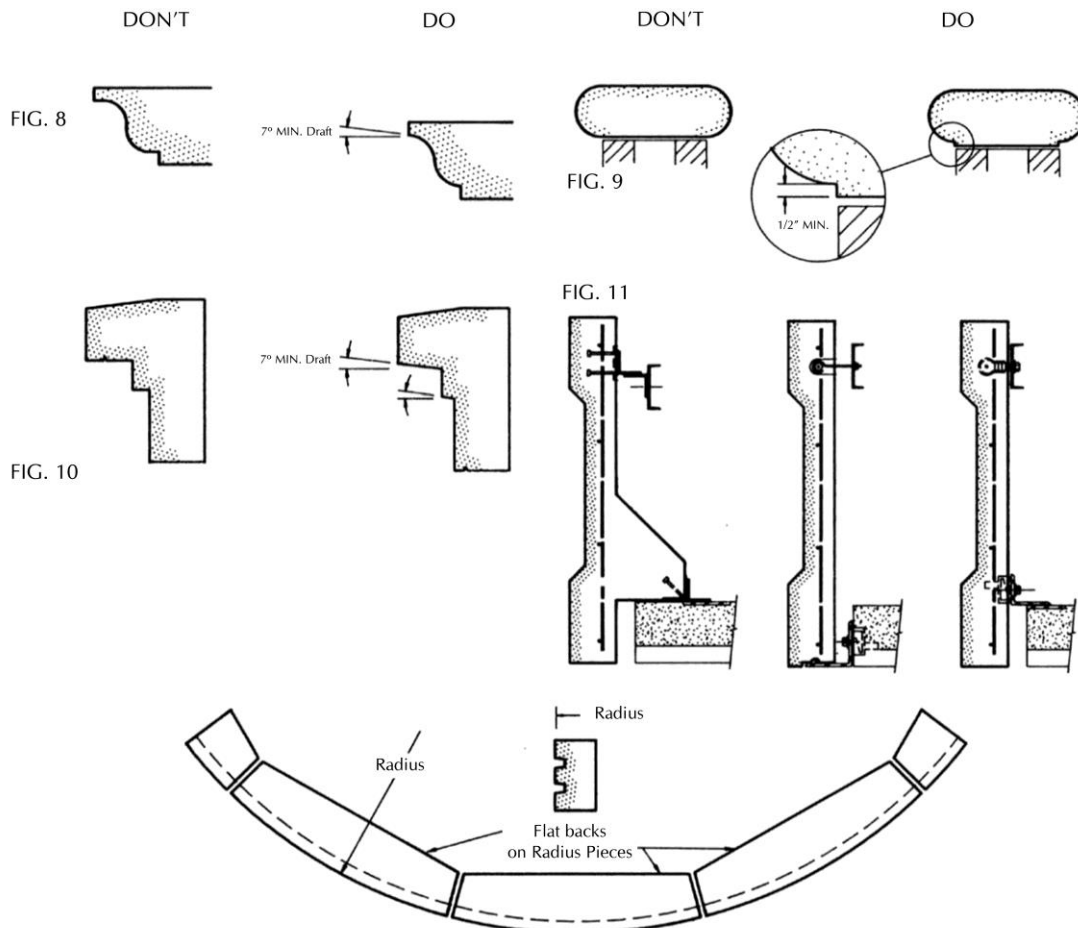
Fig. 8. Projecting portions of sections, in general, should not exceed their thickness. A 7 to 9 degree draft is usually needed to separate the production pieces from the mould and may be provided by the manufacturer even where 90 degrees is shown on the drawings.

The intersection of the unexposed or back side with the formed sides should not come to a feather edge in the mould. This can be avoided by using a shoulder as shown in Fig. 9.

The preferred section shown in Fig. 10 can be efficiently produced from a one-piece face pattern. The alternative section must be drawn across a multi-piece pattern after each casting due to no mould draft, resulting in higher costs and compromised quality.

Use standard building stone anchors as shown on page 82 whenever possible. Where relieving angles cannot be positioned to carry the load, threaded or adjustable inserts can be employed (Fig.11).

Allow enough space in the masonry wythe to make curved pieces straight on the back. This need not apply to coping and similar sections where the major unexposed side is flat at the masonry bed joint.



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