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Mortar Skew Fillet Detail and Key

A Is the wall head, the projecting up-stand wall G is generally at least two thirds the thickness of the wall below.

B Is the line of the roof truss or joists.

C Is the sarking board which projects over the wall head section left by the thinning projecting up-stand. In some instances, this has a thin rag felt over it; this was a common roofing felt that is still used under lead work but mostly the timbers are bare.

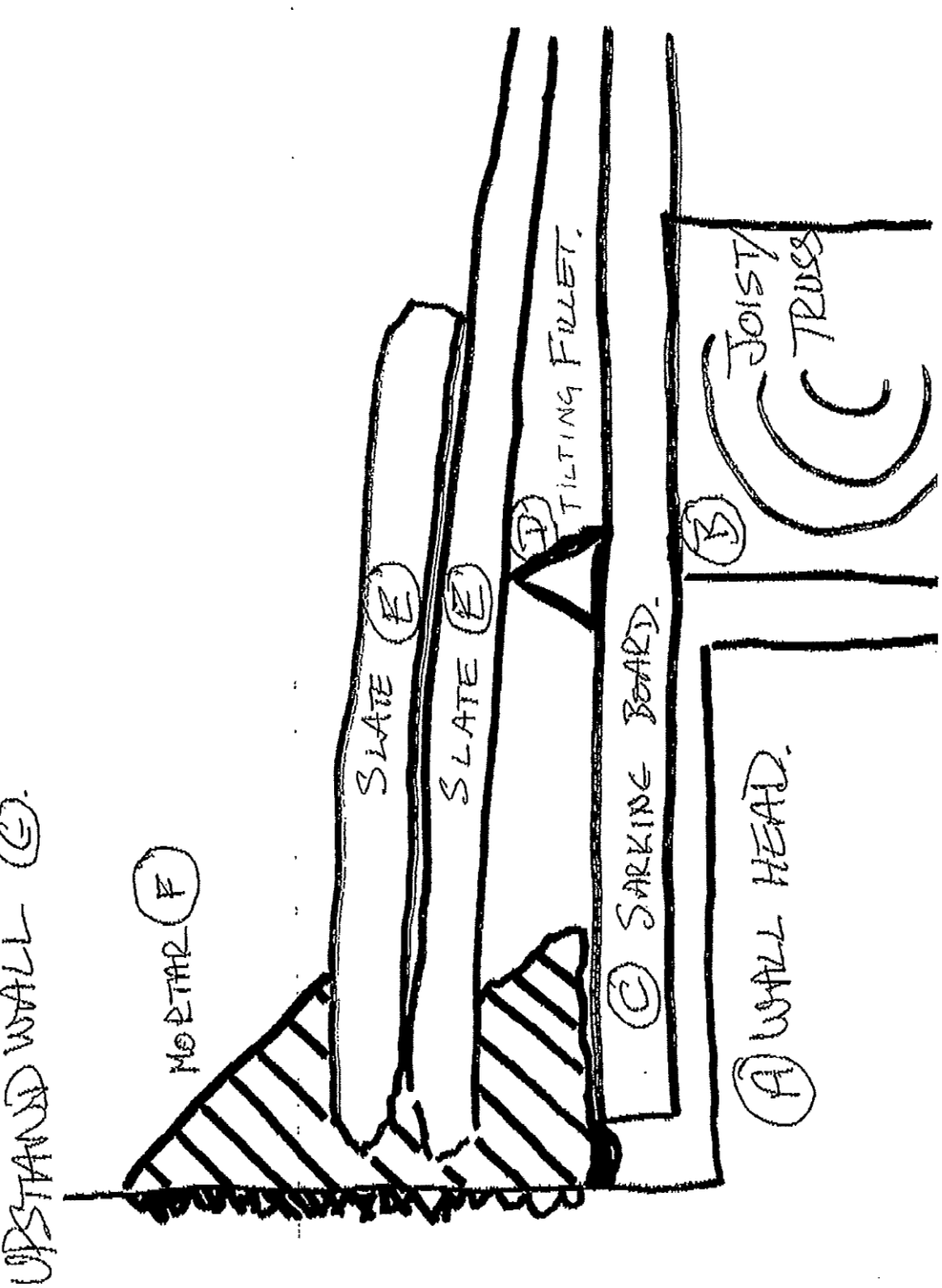
D Is the tilting fillet, mostly out of 20 x 20mm (old $^{3}/_{4}$ inch) timber giving a 12-15mm tilt to the slate.

E Are the slates – they should be properly sized and of sufficient thickness, thin slates get damaged easily at skews. People walk up and down holding onto the skew copes. So proper bonding is essential at this point.

F The mortar fillet is placed against a properly 'scutched' wall face; this is done prior to the mortar being placed. Often a slurry (of binder and water) is applied as a bonding bridge to a pre-dampened background depending on the suction of the stone. Low suction or granite backgrounds almost always require a bonding bridge.

G The raised section of the wall is built up to provide a shelter for the wall head as this is always coped or has crow steps, it also provides an overhang detail by the way of the cope projection. Mortar fillets should never be taken flush to the face of the cope, or worse onto the face of the cope.

If there is insufficient space for the mortar fillet below the cope, it is likely that tabling has been built up at some stage and this will require trimming back so an investigation of the roof timbers, sarking etc. can be carried out. These are amongst the most common details on all roofs; many have been lost through ignorance, lack of care or simply reinventing a new detail through a failure to comprehend the original. Bad workmanship often causes water ingress, nowhere more apparent than at roof details. Building professionals have over the years tried to design their way out of roof details usually to the detriment of good maintenance.


A WALL HEAD.
B JOIST / TRUSS
C SARKING BOARD.
D TILTING FILLET.
E SLATE
E SLATE
F MORTAR
G UPSTAND WALL

Specification for mortar skew fillet

Mortar:	HL 5 Hourdex hydraulic lime and local sharp Concrete Sand Or NHL 5 and sharp concrete sand with ligophob dosed at 100g per 25kg of binder, or USD additive dosed at 1kg per full bag of binder.
Ratio:	(nominally by volume) 1 part binder : 2.5 parts any sharp concrete sand (80 litres of sand per full bag of binder, or 5 builders buckets of sand filled to the top and lightly tamped down)
Mixing:	Add just enough water to achieve a stiff consistency for forming the fillets. Overly wet mixes may bleed or leach, where the masonry units offer no suction, if this occurs a poor bond to the masonry will result too.
Application:	By hand ensuring the fillet is no more than 50mm in width and finished at an angle that will shed water onto the slates. Leave the mortar work to become 'leather' hard before beating back with a churn brush to ensure good compaction and bond with the masonry units.
Curing:	Cure with light misting with clean potable water such that the mortar does not fully dry out at any time within the first 4-5 days where ambient temperatures are 15^0C average and where protection is provided in circumstances where there is a risk of temperature fall. Should the average temperature drop by say 5^0C allow a further 3-4 days curing.

Using any of the specifications or information contained within this report for any other purpose other than that stated in the brief will affect your professional liability.

Scottish Lime Centre Trust
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