



Notes:

DEFRASSING FROST DAMAGED MASONRY

Many of the face stones suffered bad frost damage in recent years causing splits and cracks, which allows portions of stone to become readily detached with a risk of falling and causing injury. This is a widespread problem and although the worst affects of the frost damage are concentrated in specific locations, the contractor is to be aware that frost damage problems can be encountered almost anywhere.

Wherever loose or easily detached fragments of stone are discovered, loose fragments are to be detached and the voids pointed up to prevent further water ingress and to allow the damaged stone to be self draining.

In cases where the fractures are too great to be sensibly repaired by small amounts of defrassing and subsequent point, report the problem to the architect and take instructions as to whether the stone requires a full indent replacement or can be repaired by a more thorough going mortar repair.

Notes:

TOOLING/ DRESSING STONE IN SITU

WEATHERING LEDGES AT JOINTS

Locations: Where stones project or are recessed.
Requirement: Carefully weather the ledge, to approval.
Method: Suitably graded carborundum blocks or tooling as appropriate.

DESCALING STONE

Requirement: Carefully remove loose scaling and powdering from stones to the extent agreed.
Method: Suitable bristle brushes or carborundum blocks.
Do not use wire brushes.

Notes:

BONDED DOWELS FOR JOINTING INSERTS ETC

Dowels: 6 mm diameter austenitic stainless steel.
Secured into clean, dry holes with adhesive. Do not use adhesive to bond stones at joints unless agreed otherwise.

Adhesive: 2 part polyester resin Exchem Resifix 3 Plus or equivalent.
Additional requirements: Follow manufacturer's recommendations. Dedust holes before inserting resin.
Holes: Drilled in the background and the rear of the replacement/ insert to receive dowels and adhesive.
Aligned to allow accurate positioning of the replacement/ insert.

Notes:

DEEP POINTING TO BADLY ERODED STONES WITH EXTENSIVE VOIDED AREAS REQUIRING GALLETING AND LOCAL MORTAR REPAIR AS WELL AS LOCAL INDENTS

Large joints and areas of voided mortar are to be filled with a galleting technique using split stone pinnings of matching sandstone to fill the voided areas, bedded in lime mortar, flush pointed, fully encase the pinnings leaving only the outer surface of the pinnings visible. Apply a brushed / stippled surface.

LIME MORTAR:
For rebuilding and repointing wide joints in existing stonework above dpc level.

Non-hydraulic lime putty plus pozzolan mortar mix within the range of 1: 2.25 and 1: 3 lime putty: sand, with PFA or GGBS to 10% of course stuff, mix may be gauged with crushed stone dust in the ratio of 1: 2.25: 0.5

Joints to be weather struck flush or recessed where arrises of stonework are rounded.

below dpc level to be laid in NHL3.5 Natural hydraulic lime mortar mix of proportions 1:2.5 lime: sand. Joint treatment as above.

Notes:

REPOINTING TO BADLY ERODED LOCALLY VOIDED FACEWORK WITH OPEN JOINTS

Work where the joint width and arrises of joints to be pointed are wide and badly weathered. Carefully rake out all loose material and expose any voided areas, reporting all deficiencies to the architect.

Fix back any loose masonry units on new bedding mortar, pinning or cramping where necessary.

Carry out repointing with successive applications of pointing mortar, not exceeding 15mm in depth, allowing each successive application to set prior to continuing, with scratched keyed surfaces to ensure a satisfactory bond and key between successive coats.

Flush pointing will not generally be feasible for badly eroded sections of masonry. The finished surface of the joint to be recessed back away from the curved arris of the block and weathered to allow satisfactory water drainage.

Notes:

STIPPLE FINISH TO JOINTS:
After the initial set has taken place, stipple joints with a stiff brush to remove laitance/excess fines and give a coarse texture.

CRAFTSMANSHIP AND SUPERVISION REQUIREMENTS FOR POINTING:
It is important that the mortar mix and the joint preparation procedures of a pointing job are followed carefully.

It is of even greater importance that the workmanship of the cutting out, preparation and placing of the mortar is carried out well. The following aspects are critical to this:

The cutting out must be deep enough and the joints cleaned and dampened to receive new mortar.

The mortar must be consistently of the specified constituents, well rammed and beaten, contain a minimum of water.

The mortar must be placed firmly against the back of a joint with the appropriate tools tamped firmly and receive the agreed surface treatment.

The quality of workmanship throughout the job must be consistently good.

B	WC	Minor revisions to frame 4	10-03-23
A	WC	Timber framing repairs noted	30-08-22
o	WC	Preliminary Issue For Comment	30-06-22
Rev	Note		Date

client
Emma & James Richardson
project
Long Barn
Much Marcle
Herefordshire
drawing title
South East elevation

project ref. 21035
drg no. 121
rev. B
scale 1:50 (A3)
date 20th June 2022

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