

FLAT ROOF CONSTRUCTION U Value 0.13 Wm2K
Polyshield 4.9 kg. high tensile polyester mineral cap sheet on
Bitulite 3 mm underlay on
110 mm Kingspan Thermarroof TR27 insulation on
Polyvap 3 mm metal lined vapour barrier on
18 mm OSB timber decking on
ex. 100 x 50 mm timber furring pieces on
170 x 47 mm timber joists at 450 mm centres (C16 grade timber)
80 mm Kingspan Thermapitch TP10 insulation fitted between
the underside of the OSB decking before installing the ceiling.
1 no. layer of 12.5 mm foil backed plasterboard finished with a
skim coat of plaster.

Single ply membrane roof design and installation shall comply with
the SPRA Design Guide 2013 Edition.

Installation of the flat roof system including all ancillary flashings,
trims, fixings etc. to be in strict accordance with the manufacturer's
instructions.

Installation should not be carried out in temperatures lower than
5 degs C or in wet or damp conditions.

Adhesives for fully bonded flat roof system to be designed to resist
wind uplift pressure of 2.0 kN/m2.

Factor of safety to be 2.0.

ROOF HOLDING DOWN STRAPS

30 x 6 x 1200 mm long galvanised m.s. holding down straps to be
screw fixed to the timber joists and the walls at 1200 mm centres.

LATERAL RESTRAINT STRAPS

30 x 6 x 1200 mm long galvanised m.s. lateral restraint straps to be
screw fixed over 3 no. joists at 1200 mm centres. Full depth dwangs
to be fitted under the straps.

Gap at end joists to be packed tight to the wall.

FIXING TO EXISTING WALL

170 x 47 mm timber bearer to be bolted to existing masonry wall at
maximum 450 mm centres using M12 expanding anchors (150 mm long)
fixed in accordance with the manufacturer's instructions.

WALL CONSTRUCTION

 U Value 0.17 Wm2K

100 mm stone outer leaf 7 Nmm2 (1. 1. 6 mortar)
100 mm cavity partially filled with
50 mm Kingspan Kooltherm K8 cavity board insulation.
100 mm concrete block inner leaf 7 Nmm2 (1. 1. 6 mortar).
Outer lintels over window and door openings to be Catnic steel
lintels type CTF 5 with minimum bearing of 150 mm
Inner lintels over window and door openings to be Robeslee
concrete lintels type C with minimum bearing of 150 mm.
Refer to the Structural Engineer's Drawings.
62.5 mm Kingspan Kooltherm K17 insulated plasterboard
to be fixed to the inner face of the inner leaf using plaster dab /
drywall adhesive bonding and then finished with a skim coat
of plaster

WALL TIES

Wall ties to be Catnic stainless steel type and to be fixed at
the following centres.

Horizontally	900 mm maximum
Vertically	450 mm maximum staggered
Window and door jambs	225 mm maximum vertically
Expansion joints	225 mm maximum vertically

D.P.C.s

Damp proof courses to be provided where shown.

VERTICAL D.P.C.s

Vertical Damp Proof Courses to be fitted where shown

F.A.I.s

Fais. to be fitted at maximum 2000 mm centres.

WEEP VENTS

Weep vents to be fitted where shown on elevations.

EXPANSION / MOVEMENT JOINTS

Expansion / movement joints to be provided where shown
on the plans and elevations. Refer to the detail on the Structural
Engineer's Drawing.

TYING IN TO EXISTING

Outer stone and inner concrete block leaf to be tied to existing
masonry wall using the Crocodile wall connector system in
accordance with the manufacturer's instructions.

FLOOR CONSTRUCTION

 U Value 0.15 Wm2K

Floor finish (ceramic tiles) on
18 mm V313 t & g chipboard glued and screwed to
125 x 50 mm timber joists at maximum 400 mm centres and
dwanged at mid span (C16 grade timber)
120 mm Kingspan Kooltherm K3 floor board insulation to be
fitted between the joists on
1 no. layer of Visqueen 500 separating membrane laid over
150 mm concrete slab RC25/30 reinforced with
1 no. layer of A393 fabric at bottom with 50 mm cover.
A strip of 25 mm thick insulation board to be placed around the
perimeter of the concrete slab.
1 no. layer of Bituthene damp proof membrane.
The bituthene damp proof membrane to be carried up the inner
face of the walls and connect to the wall d p c to form an
impervious barrier.
All joints in the damp proof membrane to be well lapped
(300 mm minimum). Damp proof membrane to be laid on a
50 mm thick layer of sand blinding on
150 mm of well consolidated hardcore.

FOUNDATIONS

Refer to the Structural Engineer's Drawings

700 x 200 mm concrete strip foundation reinforced with 1 no.
layer of A393 fabric at bottom with minimum 50 mm cover.

Footings to be cast on to bearing stratum at the same depth as
the existing house footing.

Formation of all new foundations to be in natural firm
clay stratum. Allowable bearing pressure – 100 kN/mm2.

3 no. 16 mm dia. stainless steel dowel bars at new/ old foundation
junction to be resin fixed 150 mm into existing.

Concrete in footings to comply with B.S. 8110.

Concrete grade RC25/35. Blinding grade C10

Fabric reinforcement to comply with B.S. 4483.

EXTENSION AND ALTERATIONS
TO HOUSE AT:
169 NITHSDALE ROAD
POLLOKSHIELDS
GLASGOW G41 5QS

drg. no. 7