



#### LEGEND & NOTES:

# **FOUNDATIONS:**

Reinforced concrete raft foundations to engineers detail. (See detail drawing). Provide 50mm cover at bottom and sides.

Foundation concrete strength to be 35N20.

#### **GROUND FLOOR:**

75mm Sand/Cement screed on 150mm Kingspan Kooltherm K3 Floor board insulation on Monarflex radon barrier on reinforced concrete raft on min. 200mm well compacted hardcore (See foundation detail), achieving a U-Value of 0.11Wm<sup>2</sup>k.

## EXISTING:

Timber suspended and solid ground floors to be removed and new formation level to be established with min. 75mm well compacted CL804. 75mm Sand/Cement screed on 150mm Kingspan Kooltherm K3 Floor board insulation 100mm concrete sub-floor on Monarflex radon barrier on 50mm sand blinding on well compacted CL804.

## **NEW WALLS:**

100mm concrete block inner leaf, 150mm cavity containing 120mm Kingspan K8 PIR insulation, 100mm concrete block outer leaf, achieving a U-Value of 0.17Wm<sup>2</sup>k. Internal walls to be constructed of 100mm timber studs with 12.5mm gypsum plasterboard with skim finish both sides.

## WALL TIES:

Wall Ties to I.S.268 vertical twist type, stainless steel @750mm horizontal spacings and 450mm vertical spacings, staggered or such spacings as will maintain the same number of ties per square metre, and 300mm vertical spacings at unbonded jambs to all openings in cavity walls within 150mm of the opening.

## **EXISTING WALLS**

internal plaster to be stripped to expose stone wall to receive50mm metal wall liner studs fixed to maintain 25mm cavity between stone and studs. 50mm Isover Optima insulation fixed between studs with vapour control layer and 72mm composite plasterboard to inner face with gypsum skim finish.

## ROOF:

Traditional cut roof in accordance with IS:444;1998 Tegral 'Endurance' slate on 35x38mm treated s/w battens on Tyvek breatheable membrane on 44x150mm C18 rafters @ 400mm c/s birds mouthed onto 100x75mm wall plate strapped to external walls with 5x30mm galvanised strapsin accordance with I.S.444;1998. Ceiling joists as per section notes.

125mm Kingspan Kooltherm K7 insulation between rafters & 72.5mm Kingspan Kooltherm K18 below rafters to sloped 2 x 150mm layers of Metac Mineral quilt insulation to ceiling

Ceiling joists to be bolted to rafters. 25mm facia, 19mm Soffit TG&V, 125mm half round gutter. Fix galvanised M.S. straps of cross-sectional area not less than 30x5mm from gable walls (1) along roof slope at max. 2m centres to span at least 2 rafters. Anchor straps to uncut blocks. Pack and nog the rafters off the wall.

(2) At ceiling level at max. 2m centres to span at least 2 joists. Pack and nog the joists off the wall. Wall plates to be braced to floor joists @ 1m c/s. 75x100mm treated wallplate.

# **EXISTING ROOF**;

Existing slate roof covering to be retained and repaired as necessary.

2 layers of 150mm Volcalis quilt insulation to be fitted between and above existing ceiling joists. New trapdoor to be provided for access.

Lead flashing to chimneys to be replaced.

# SPACE & DHW HEATING SYSTEM:

An Air to Water heat pump is to be fitted to provide all Space and DHW requirements. This system will be designed and installed by a specialist installer / supplier. The proposed system and its design needs to be forwarded to the engineer, prior to been fitted, in order to confirm compliance with TGD Part L 2021.

# **VENTILATION:**

Natural Ventilation as per TGD F 2019.

