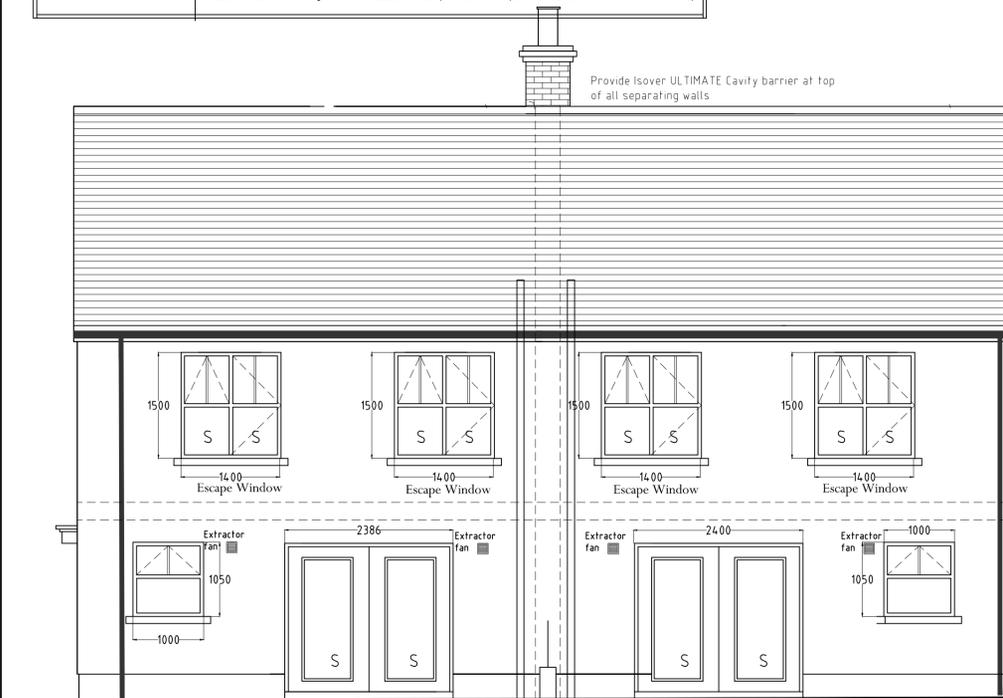




FRONT ELEVATION

Construction Information (for insulation purposes)	
Oil fired boiler	Primary heating system to be a Grant Vortex Pro 15 -26 Kitchen/Utility range with an efficiency of 93.6 - 97% Gross. ('A' rating on the SEDBUK database)
Low energy light fittings	a min of 30% of all light fitting should be Low energy
Windows & External Glazed Doors	all windows & full glazed doors to be double glazed with Hard Coat (en=20... Low-E Argon filled with a min 16mm spce between glass, U-value of 2.0, half glazed doors as before with U-value of 2.5
First Floor Ceiling Construction	Main roof provide 2no layers of 200mm thick Knauf Earthwool loft roll 44 combi cut, to make total depth of 400mm. If Attic space is to be used as STORAGE then 150x38mm cross battens must be fixed on top of ceiling joists before flooring is fitted
Cavity wall Construction	Provide 19mm external plaster 100mm thick conc block outer leaf 150mm Blown Platinum silver bead 100mm thick conc block inner leaf 13mm internal plaster
Solid Floor Construction	100mm deep screed 100mm Xtratherm Thin-R XT/UF insulation in floor screed with 25mm Insulation around perimeter walls 150mm deep conc subfloor Radon barrier, B.B.A approved 25mm sand blinding with min 225mm deep mech. compacted hardcore, max 600mm deep



REAR ELEVATION

It is the Contractors responsibility to check all dimensions on site. Any discrepancy found at set out shall be reported to the Architect/ Supervisor prior to work commencement.

Any variants made on site from approved drawings is taken at clients own risk

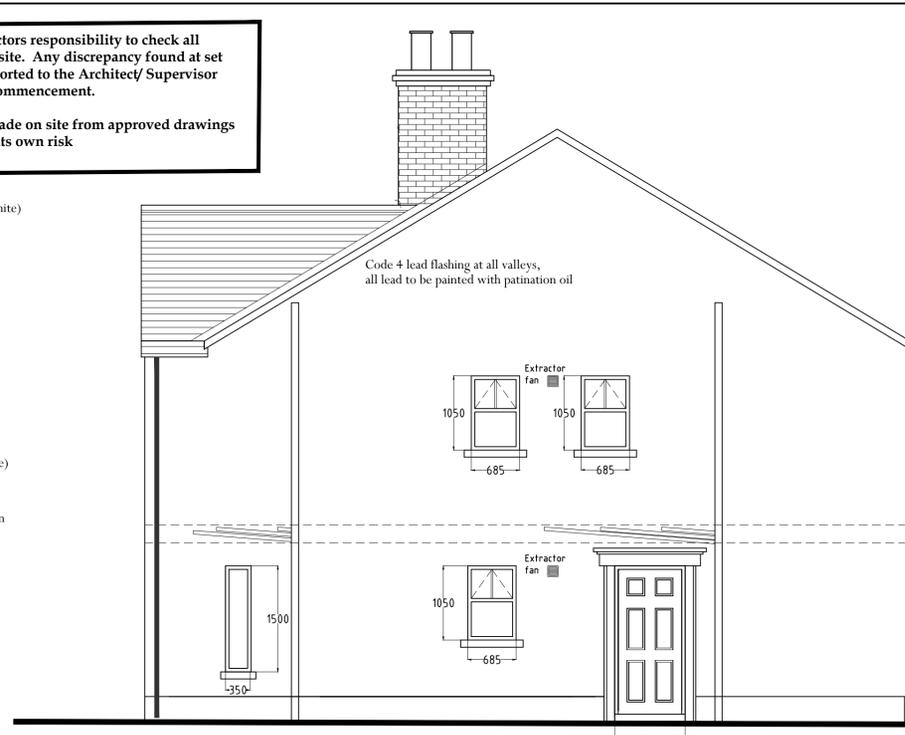
Quinn Roof tile (western Graphite)

Aqualine extruded aluminum gutters (moulded)
Flush joint aluminum square downpipes (Black)

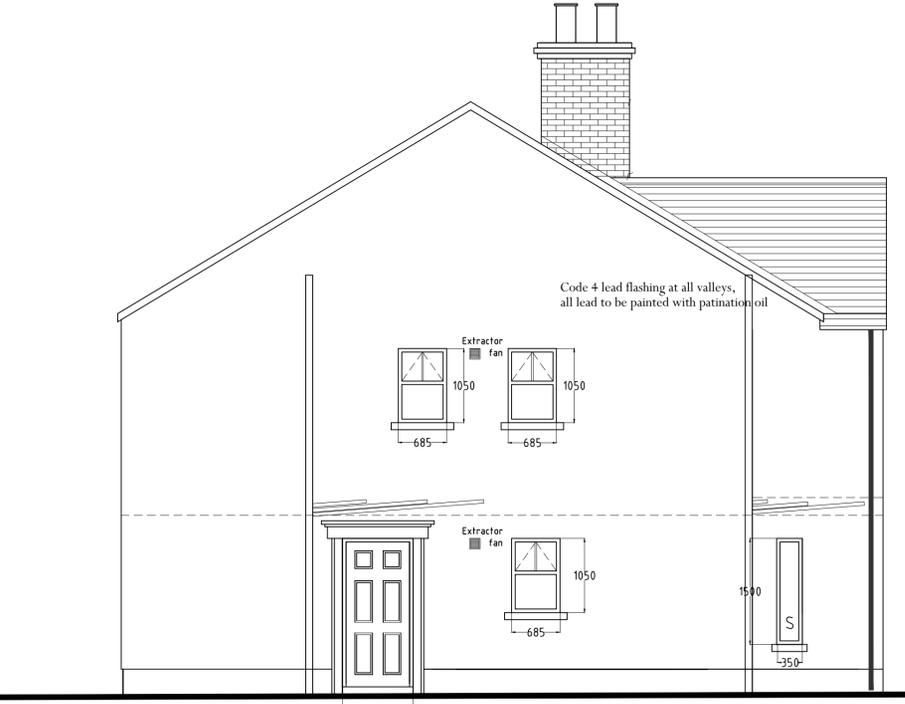
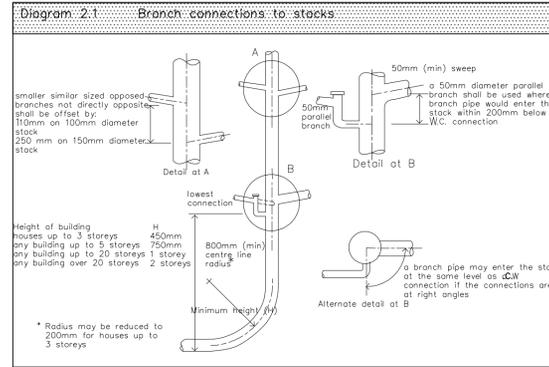
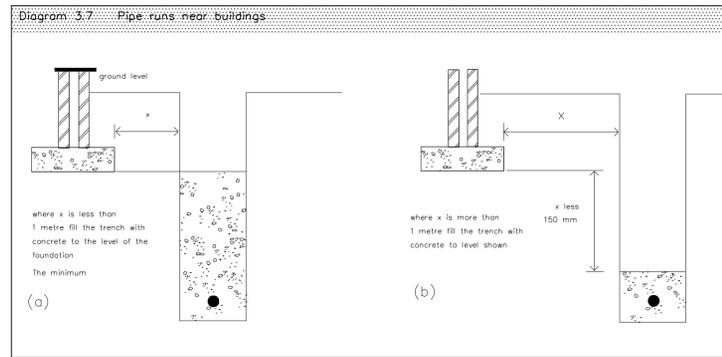
All wall to be roughcast plaster finish (painted- colour to clients choice)
Provide Tobermore Lansdowne Heather brickwork where shown

Double glazed windows and doors (black)
Provide sills with 90mm leading edge

Smooth plaster plinth



SIDE ELEVATION



SIDE ELEVATION

Heating:
All Pipes, ducts and hot water storage vessels shall be insulated to standards not less than those given in DBSG publication "Domestic Building Services Compliance Guide".
All primary circulation pipes for heating and hot water circuits should be insulated wherever they pass outside the heated living space or through voids which communicate with and are ventilated from unheated spaces.
Primary circulation pipes for domestic hot water circuits should be insulated throughout their length, subject only to practical constraints imposed by the need to penetrate joists and other structural elements.
All pipes connected to hot water storage vessels, including the vent pipe, should be insulated for at least 1 metre from their points of connection to the cylinder (or they should be insulated up to the point where they become concealed).
Hot water to be insulated so as to limit the standing heat loss to not more than 1w/litre when tested in accordance with BS 1566: part 1 2002
All pipework from oil burner to be insulated with min 50mm thick pipe insulation. Pipe to be protected within pvc ducting and surrounded with pea gravel

Commissioning
On completion of the installation of a boiler or a hot water storage system, together with associated equipment such as pipework, pumps and controls, the equipment should be commissioned in accordance with the manufacturer's instructions.
These instructions will be specific to the particular boiler or hot water storage system.
The installer should give a full explanation of the system and its operation to the user, including the manufacturer's user manual where provided.

Oil Tanks:-
An oil storage tank should be constructed in accordance with the recommendations of OFS T100: 2008 for polyethylene oil storage tanks or OFS T200: 2010 for steel oil storage tanks.
Above ground oil storage tank shall be placed on no hard surface constructed of concrete or paving slabs not less than 42mm thick. The hard surface shall extend beyond the perimeter of the tank, or it external skin if its an intergrally banded type, by not less than 300mm.
Oil tank to be banded to a capacity of 110% of its capacity
The fuel pipework from the tank shall be resistant to the effects of fire and be fitted with a fire valve system where it enters the building, in accordance with the relevant recommendations in BS 5410 Part 1:1997, section 8.2 and 8.3
All proposed combustion appliances to be capable of burning or adapted to burn smokeless fuels

Energy Rating/ Accredited details:-
The Building fabric shall be constructed such that there are no readily avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at joints between elements, and at edges of elements such as those around door and window openings
The dwelling shall be constructed in accordance with the details given in the (DCLG publication) "Accredited construction details for Part F
An energy performance certificate for the completed dwelling will be calculated, using the same software that is used to calculate the DER and TER, and a notice stating the energy rating will be fixed in the dwelling
The person carrying out the work shall give, not more than 5 days after completion of the work, a notice in writing to the building owner giving sufficient information, including operational and maintenance requirements, to enable the dwelling and its fixed building services to be operated and maintained in an energy efficient manner. The instructions should be directly related to the specific system installed in the dwelling and should be readily understandable by the occupier. They should be in a durable format that can be kept and referred to over the service life of the system.
EPC shall be forwarded on completion of dwellings

Air permeability:-
Air permeability of 10m³ / (h.m²)@50Pa has been used in design calculation and this rate (or less) must be achieved by test on completion of the dwelling. Accredited construction details must be strictly adhered to, all design measures as included in calculations to be provided in site, wet plaster finishes to be used and district council must receive all statutory notices
General
The heating and hot water systems shall be designed, installed and commissioned such that, for the purpose of the conservation of fuel and power, the system and its controls are handed over in efficient working order.
All fixed building service shall be commissioned in accordance with the procedures given in the DSCG publication "Domestic Building Services Compliance Guide" for the relevant fuel types, and in accordance with the manufacturers commissioning procedures
A notice in writing confirming that all fixed building services have been properly commissioned is required to be given to the building owner not more than 5 days after completion of the commissioning. The notice should be signed by a suitably qualified person.

Hot water storage
Hot water cylinder (140litres) to be insulated so that the standing heat loss does not exceed $Q = 1.15 \times (0.2+0.051V/3)$ kWh/day, where V is the volume of the cylinder.
Cylinder to be fitted with a factory applied coating of 80mm insulation

System circulation
Space heating systems and domestic hot water primary circuits should have fully pumped circulation. If the boiler manufacturer's instructions advise installation of a bypass, an automatic bypass valve should be provided and the manufacturer's instructions on minimum pipe length followed.

Hot water storage
Hot water cylinder (140litres) to be insulated so that the standing heat loss does not exceed $Q = 1.15 \times (0.2+0.051V/3)$ kWh/day, where V is the volume of the cylinder.
Cylinder to be fitted with a factory applied coating of 80mm insulation

All hot water vessels should carry a label with the following information:
i. type of vessel (vented, unvented, combination unit or thermal store);
ii. nominal capacity in litres;
iii. standing heat loss in kWh/day;
iv. heat exchanger performance in kW;
v. reference to product compliance with relevant standard (e.g. BS 1566, BS 12897) and logos of accreditation bodies as required.

System preparation and water treatment
Central heating systems should be thoroughly cleaned and flushed out before installing a new boiler.
During final filling of the system, a chemical water treatment inhibitor meeting the manufacturer's specification or other appropriate standard should be added to the primary circuit to control corrosion and the formation of scale and sludge.
Installers should also refer to the boiler manufacturer's installation instructions for appropriate treatment products and special requirements for individual boiler models.

Where the mains total water hardness exceeds 200 parts per million, and if required by the manufacturer, provisions should be made to treat the feed water to water heaters and the hot water circuit of combination boilers to reduce the rate of accumulation of limescale.

Boiler interlock
Boiler-based systems should have a boiler control interlock in which controls are wired so that when there is no demand for either space heating or hot water, the boiler and pump are switched off.

The use of thermostatic radiator valves (TRVs) alone does not provide interlock.

Space heating Zones
Dwellings with a total usable floor area up to 150 m² should be divided into at least two space heating zones with independent temperature control, one of which is assigned to the living area.
Dwellings with a total usable floor area greater than 150 m² should be provided with at least two space heating zones, each having separate timing and temperature controls.
For single-storey open-plan dwellings in which the living area is greater than 70% of the total floor area, sub-zoning of temperature control is not appropriate

Water heating Zones
All dwellings should have a separate hot water zone in addition to space heating zones.
A separate hot water zone is not required if the hot water is produced instantaneously, such as with a combination boiler.

Time Control of space and water heating
Time control of space and water heating should be provided by:
i. a full programmer with separate timing to each circuit;
ii. two or more separate timers providing timing control to each circuit; or
iii. programmable room thermostat(s) to the heating circuit(s), with separate timing of the hot water circuit.
For dwellings with a total usable floor area greater than 150 m², timing of the separate space heating zones can be achieved by:
iv. multiple heating zone programmers; or
v. a single multi-channel programmer; or
vi. programmable room thermostats; or
vii. separate timers to each circuit; or
viii. a combination of (iii) and (iv) above.

Where the hot water is produced instantaneously, such as with a combination boiler, time control is only required for space heating zones.

Temperature control of space heating
Separate temperature control of zones within the dwelling should be provided using:
i. room thermostats or programmable room thermostats in all zones; and
ii. individual radiator controls such as thermostatic radiator valves (TRVs) on all radiators other than in the reference rooms (with thermostat) and bathrooms.

Temperature control of domestic hot water
Domestic hot water systems should be provided with a cylinder thermostat and a zone valve or three-port valve to control the temperature of stored hot water. b. In dwellings with a total floor area greater than 150 m² it would be reasonable to provide more than one hot water circuit, each with separate timing and temperature controls. This can be achieved by:
i. multiple heating zone programmers; or
ii. a single multi-channel programmer; or
iii. separate timers to each circuit.
c. Non-electric hot water controllers should not be used.

COLLINS DESIGN
ARCHITECTURE
INTERIORS

Client:-
Clanmore Developments

Project:-
Proposed Housing development of 4no semi detached houses with detached domestic garages at land to the rear of Loughmuck Meadows, Fintona

Drawing Title:
Proposed Elevations
(House Type 1)

Date: 09-07-18
Scale: 1:50

Revision:-
A-17-10-18 BCA

Project No: CD/CDF
Drawing no: 04

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