

Proposed garage conversion for Mr & Mrs Dinardo at 19 Abbey Place, Airdrie

GARAGE CONVERSION

ROOF

100mm Crown wool laid between ceiling joists with 170mm Crown wool over ceiling joists 12.5mm plasterboard finish. Continuous ridge vents to be provided 5mm along length of ridge. Continuous eaves vents to be provided to vent roof space 25mm to eaves and vent tiles to comply with B.S. 5250 1989. Facia and soffit board to match existing.

U=0.15 W/m²°C

WALLS TO GARAGE

102.5mm facing brick outer leaf to match existing building, 50mm cavity, breather membrane, 12.5mm Sterling board 50x140mm timber studs at 600 mm cts. top and bottom rail 50x140mm. 80mm Kingspan Kooltherm K12 insulation between studs with 32.5mm Kooltherm K18 insulation over studs polythene vapour barrier. Timber frame to be tied down with galv MS straps. All timber to be treated.

Cavity ties. be Hydro Air P6 Stainless steel single nail 600mm horiz. 450mm vert. doubled in number at reveals. DPC's to be provided at all door thresholds window cills jambs and lintols. Furfix profiles or equal to tie new wall to existing walls. All brick to comply to 1:1:6 Brick class 20.5.

Cavity sealed at wallhead and cavity and around all openings with 50x50mm treated cavity barriers wrapped in D.P.C. every 8m. Vertical cavity barriers to be inserted at corners.

Cavity perpend vents to be installed at high and low level every 1.2 metre centres. All DPCs to be a minimum of 150mm above ground level.

Existing lintels to be raised to line through with existing.

U= 0.20 W/m² °C

WALL BETWEEN GARAGE AND STORE

12.5mm plaster board 1000gauge polythene vapour barrier 50x150mm stud partition at 600mm cts 120mm Kooltherm K12 18mm plywood sheathing 12.5mm plasterboard.

FLOOR (Suspended Timber Floor)

22mm T & G flooring on 50x150mm treated joists at 600mm cts. on 100x22mm wallplate on DPC 140mm Kingspan K103 suspended between floor joists.

U= 0.18 W/m²°C

WALLS BELOW NEW WINDOW

102.5mm facing brick outer leaf to match existing building, 50mm cavity, breather membrane, 12.5mm Sterling board 50x140mm timber studs at 600 mm cts. top and bottom rail 50x140mm. 80mm Kingspan Kooltherm K12 insulation between studs with 32.5mm Kooltherm K18 insulation over studs polythene vapour barrier. Timber frame to be tied down with galv MS straps. All timber to be treated.

Cavity ties. be Hydro Air P6 Stainless steel single nail 600mm horiz. 450mm vert. doubled in number at reveals. DPC's to be provided at all door thresholds window cills jambs and lintols. Furfix profiles or equal to tie new wall to existing walls. All brick to comply to 1:1:6 Brick class 20.5.

Cavity sealed at wallhead and cavity and around all openings with 50x50mm treated cavity barriers wrapped in D.P.C. every 8m. Vertical cavity barriers to be inserted at corners.

Cavity perpend vents to be installed at high and low level every 1.2 metre centres. All DPCs to be a minimum of 150mm above ground level.

U= 0.22 W/m² °C

WINDOWS

UPVC to match existing to client's requirements. Ventilation to be 1/30th of the floor area. Daylighting to be 1/15th of the floor area. Trickle vents 12000m² min. 1750mm above floor level.

Mech. vent to en-suite intermittent extract 15 lts./sec. 10,000mm² trickle vent to shower room

INTERNAL PARTITIONS

Timber stud partitions 47x97mm studs at 600mm cts. 12.5mm plasterboard both sides 100mm mineral quilt insulation between studs minimum 10kg/m³. Sound performance 43dB Rw. Minimum door widths to be 775. Impervious finish to shower area.

ELECTRICAL

Outlets and controls of electrical fixtures and systems should be positioned at least 350mm from any internal corner, projecting wall or similar obstruction and unless the need for a higher location can be demonstrated not more than 1.2m above floor level. This would include fixtures such as sockets switches, fire alarm call points and timer controls or programmers within this height range.

Light switches should be positioned at a height of between 900mm and 1.1m above floor level.

Standard switched or unswitched socket outlets and outlets for other services such as telephone or television should be positioned at least 400mm above floor level. Above an obstruction, such as a worktop, fixtures should be at least 150mm above the projecting surface.

Where sockets are concealed, such as to the rear of white goods in a kitchen, separate switching should be provided in an accessible position to allow the appliance to be isolated.

All new rooms of more than 4square metres to be provided with an electrical light and switch the light to be positioned in the ceiling.

Lighting to new shower room to be a shrouded fitting and switch to be pull cord or mounted outside shower room.

Smoke detector to be fitted to new hallway and hardwired back to mains complying with BS 5839: part 6 2019. Smoke alarms should be ceiling mounted and located such that their sensitive elements are in the case of a smoke alarm, between 25mm and 600mm below the ceiling, and at least 300mm away from any wall or light fittings and in the case of a heat alarm, between 25mm and 150mm below the ceiling. Heat alarm to comply with BS 5446: Part 2: 2003.

UNDERBUILDING BELOW NEW WINDOW

250mm external cavity wall to DPC level. 100mm blockwork inner leaf, 50mm cavity, 150mm blockwork outer leaf below ground level, 102.5mm facing brick above ground level.

Cavity filled from foundation level to ground level with lean mix concrete.

FOUNDATIONS BELOW NEW WINDOW

External (cavity) wall 600x200mm. All foundations to be taken to the same level, minimum 600mm below F.G.L. or below invert level of drainage whichever is the greatest. Bearing stratum to be adequate for safe bearing pressure of 100kN/m. Soft spots to be removed and resultant voids infilled with mass concrete (lean mix). Foundations to be taken to same level as existing foundations. New foundations to be tied to existing using 900mm long dowel bars.

Existing vents to garage to be blocked off.

GENERAL NOTES

The building will be constructed in accordance with the provisions of BRE report BR 262:1994. Infiltration of air into the building must be limited as far as

reasonably possible by sealing the gaps between dry linings and masonry walls at the edges of windows, doors, skirtings and roof.

Windows and doors to have a neoprene seal at all joints, all external openings to have joints sealed with mastic. Air infiltration and thermal bridging to be to BRE report 262: 2002

All hot water pipes and radiator pipework to be insulated in accordance with Standard 6.4.1 and to comply with BS 5422: 2009

All dimensions to be checked on site

No HAC

All demolition's and downtakings to BS 6187 1982 and HASW.

All work to be finished to a good decoratable standard.

All builderwork to the satisfaction of the Local Authority, in accordance with relevant British Standards and in accordance with manufacturers written instructions.

This specification is to be read in conjunction with the accompanying drawings.

Prior to the removal of any loadbearing or supporting walls, the existing structure must be adequately propped and remain so until all the alteration work is complete and cured.

These plans are for the purpose of Planning Permission and Building Control Approval

All work to be carried out only from stamped approved plans.

All electrical to the 16th edition of the I.E.E. regs, B.S. 7671 2018

All drainage to the entire satisfaction of the Local Authority

Heating controls to be TRV's on all radiators

Brick to match existing and to comply with BS EN771-1, suitable for moderate exposure. F1

If upon excavation, non-traditional foundations are exposed, then the works shall cease and the Building Standards department contacted.

Doors to comply with Section 2 of "Secured by Design"

A door or window in the locations described in clause 4.13.1 should be tested and certified by a *notified body* as meeting a recognised standard for security such as BS PAS 24: 2007 for doorsets or BS 7950: 1997 for windows.

To ensure a robust, basic standard of security, a doorset or window in the locations described in clause 4.13.1 should be designed and constructed in accordance with the general recommendations of the product standard appropriate for the material used, such as:

- BS 7412: 2007, for PVCu units;
- BS 644: 2009, for timber window units;
- BS 4873: 2009, for aluminium alloy units;
- BS 6510: 2005, for steel-framed units.

Vulnerable windows should be constructed to resist attempts to force frames and, if openable, ironmongery. Windows which can be opened should be fitted with either:

- a keyed locking system that uses a removable key; or
- a keyless locking system, together with glazing which incorporates laminated glass or a similarly robust glazing material.

Where a material standard for a doorset is not available, it should be designed and constructed in accordance with the recommendations in Annex A of BS 8220-1: 2000, together with the following recommendations, to ensure a robust basic standard of security.

If single swing the doorset should be fitted with at least one and a half pairs of hinges meeting the recommendations of BS EN 1935: 2002 for hinge grade 11 or above. Hinges fitted to an outward-opening door should be of a type that does not permit the hinge pin to be removed unless the door is open. Otherwise, hinge bolts should be fitted to ensure the door leaf will remain secure when closed.

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A doorset should include a single-point locking device to BS 3621: 2007 (for keyed egress) or to BS 8621: 2007 (for keyless egress) or a multipoint locking system. A deadlocking facility should be provided. Any lock cylinder should be in accordance with BS EN 1303: 2005, grade 5 key security and grade 2 attack resistance as a minimum.

Access to door locks from outside by breaking of glazing, in or adjacent to a door leaf should be prevented by use of laminated glass or a similarly robust glazing material.

A sliding door should have a multi-point deadlocking system with 3 or more hook or similar bolts. To prevent removal of the door, an anti-lift device should be fitted. Shoot bolts, if used, should locate into the head of the frame. A doorset with more than one door leaf should include a means of securing locked.

Hot water discharge from sanitary fittings

Guidance to the Water Byelaws recommends that, to prevent the development of Legionella or similar pathogens, hot water within a storage vessel should be stored at a temperature of not less than 60° C and distributed at a temperature of not less than 55° C.

If water is supplied at high temperature, from any source, there is a danger of scalding to *building* users. Risk of severe injury increases proportionally with increase in temperature and with extent of contact.

Facilities used for personal hygiene

To prevent scalding, the temperature of hot water, at point of delivery to a bath or bidet, should not exceed 48° C

A device or system limiting water temperature should not compromise the principal means of providing protection from the risk of Legionella. It should allow flexibility in setting of a delivery temperature, up to a maximum of 48°C, in a form that is not easily altered by *building* users. This will allow reduction of temperature where, for example, facilities are used by those more at risk from injury, such as elderly people or unsupervised children.

www.tmva.org.uk Where both hot and cold water are supplied to a facility, the above may be achieved by use of a thermostatic mixing valve (TMV) or fitting complying with BS EN 1111: 1999 or BS EN 1287: 1999, fitted as close to the point of delivery as practicable. Guidance on the installation, use and maintenance of thermostatic mixing valves and fittings can be found in BRE information domestic | safety | danger from heat | 2006 4.9.3 — 4.9.5

Paper IP 14/03 and from the Thermostatic Mixing Valve Association (TMVA). Water efficient fittings should be provided to all WCs and WHBs within a dwelling.

Dual flush WC cisterns should have an [average flush](#) volume of not more than 4.5 litres. Single flush WC cisterns should have a flush volume of not more than 4.5 litres. Taps serving wash or hand rinse basins should have a flow rate of not more than 6 litres per minute.