

SEPARATING FLOOR

40mm Gyvlon levelling screed Two layers of 5mm Ethafoam

150mm concrete beam and block floor (300kg/m²)

12.5mm standard grade plasterboard with 75mm cavity

TEST ORGANISATION - Sound Research Laboratories Limited

REPORT / TEST No. / TEST DATE – C/03/5L/0726/1 / Tests AF3 and I3 / 24^{th} June 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

 $D_{nT,w}$ (C ; C_{tr}) - 52 (-2 ; -7) dB

 $D_{nT,w} + C_{tr} - 45 dB$

L'_{nT,w} (C_I) - 59 (-2) dB

Floor Construction

- 150mm concrete beam and block floor (300kg/m²) built into cavity block walls on four sides.
- Where beams were running parallel to walls, tray blocks with insitu concrete were installed.
- Sand cement sealer coat brushed over floor surface and into joints between blocks and beams.
- Two layers of 5mm Ethafoam butt jointed and taped.
- 40mm Gyvlon levelling screed applied over a polyethylene slip-sheet with a perimeter strip of 8mm polyethylene foam.
- A ceiling comprising 12.5mm standard grade (Type 1) plasterboard fixed to the support channels at 400mm centres and a clear cavity of 75mm.

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd. flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising cavity dense concrete block walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m². Two leaves of 100mm dense concrete blocks with a 50mm cavity with wall ties at 600mm centres horizontally and 450mm vertically. 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with 12.5mm standard grade (Type 1) plasterboard fixed on plaster dabs.

Ac/01





40mm Gyvlon levelling screed Two layers of 5mm Ethafoam

150mm concrete beam and block floor (300kg/m²)

15mm standard grade plasterboard with 75mm cavity

TEST ORGANISATION - Sound Research Laboratories Limited

REPORT / TEST No. / TEST DATE - C/03/5L/0766/1 / Tests 1 and 2 / 8th August 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

 $D_{nT,w}$ (C ; C_{tr}) - 52 (-2 ; -6) dB

 $D_{nT.w} + C_{tr} - 46 \text{ dB}$

L'_{nT,w} (C_I) - 62 (-4) dB

CONSTRUCTION DETAILS

Floor Construction

- 150mm concrete beam and block floor (300kg/m²) built into cavity block walls on four sides.
- Where beams were running parallel to walls, tray blocks with insitu concrete were installed.
- Sand cement sealer coat brushed over floor surface and into joints between blocks and beams.
- Two layers of 5mm Ethafoam butt jointed and taped
- 40mm Gyvlon levelling screed applied over a polyethylene slip-sheet with a perimeter strip of 8mm polyethylene foam.
- Ceiling comprising 15mm standard grade (Type 1) plasterboard fixed to support channels at 400mm centres and a clear cavity of 75mm.

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd. flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising cavity dense concrete block walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m². Two leaves of 100mm dense concrete blocks with a 50mm cavity with wall ties at 600mm centres horizontally and 450mm vertically. 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with 12.5mm standard grade (Type 1) plasterboard fixed on plaster dabs



SEPARATING FLOOR

40mm Gyvlon levelling screed Two layers of 5mm Ethafoam

150mm concrete beam and block floor (300kg/m²)

Two layers of 12.5mm standard grade plasterboard with 75mm cavity

TEST ORGANISATION - Sound Research Laboratories Limited

REPORT / TEST No. / TEST DATE - C/03/5L/0726/1 / Tests AF2 and I2 / 23rd June 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

 $D_{nT,w}$ (C ; C_{tr}) - 53 (-2 ; -6) dB

$D_{nT,w} + C_{tr} - 47 \text{ dB}$

L'_{nT,w} (C_I) - 58 (-3) dB

Floor Construction

- 150mm concrete beam and block floor (300kg/m²) built into cavity block walls on four sides.
- Where beams were running parallel to walls, tray blocks with insitu concrete were installed.
- Sand cement sealer coat brushed over floor surface and into joints between blocks and beams.
- Two layers of 5mm Ethafoam butt jointed and taped.
- 40mm Gyvlon levelling screed applied over a polyethylene slip-sheet with a perimeter strip of 8mm polyethylene foam.
- A ceiling comprising two layers of 12.5mm standard grade (Type 1) plasterboard fixed to support channels at 400mm centres and a clear cavity of 75mm.

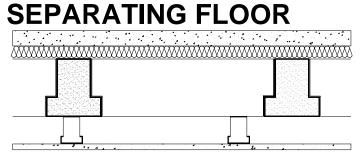
The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd., flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising cavity dense concrete block walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m². Two leaves of 100mm dense concrete blocks with a 50mm cavity with wall ties at 600mm centres horizontally and 450mm vertically. 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with 12.5mm standard grade (Type 1) plasterboard fixed on plaster dabs.





40mm Gyvlon levelling screed 30mm Rockwool Rockfloor

150mm concrete beam and block floor (300kg/m²)

15mm standard grade plasterboard with 75mm cavity

TEST ORGANISATION - Sound Research Laboratories Limited

REPORT / TEST No. / TEST DATE - C/03/5L/0781/1 / Tests A2 and I2 / 28th August 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

D_{nT,w} (C ; C_{tr}) - 51 (-2 ; -6) dB

 $D_{nT.w} + C_{tr} - 45 dB$

L'_{nT,w} (C_I) - 56 (-2) dB

Floor Construction

- 150mm concrete beam and block floor (300kg/m²) built into cavity block walls on four sides.
- Where beams were running parallel to walls, tray blocks with insitu concrete were installed.
- Sand cement sealer coat brushed over floor surface and into joints between blocks and beams. 30mm Rockwool Rockfloor slabs laid over floor.
- 40mm Gyvlon levelling screed applied over a polyethylene slip sheet with a perimeter strip of 30mm Rockwool Rockfloor.
- A ceiling comprising 15mm standard grade (Type 1) plasterboard fixed to support channels at 400mm centres and a clear cavity of 75mm.

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

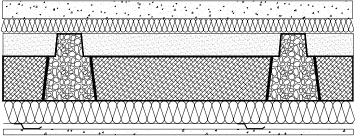
If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd. flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising cavity dense concrete block walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m². Two leaves of 100mm dense concrete blocks with a 50mm cavity with wall ties at 600mm centres horizontally and 450mm vertically. 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with 12.5mm standard grade (Type 1) plasterboard fixed on plaster dabs.



SEPARATING FLOOR



40mm Gyvlon levelling screed 30mm Rockwool Rockfloor

150mm concrete beam and block floor (300kg/m²)

50mm x 50mm timber battens at 600mm centres with 50mm mineral wool in cavity 12.5mm standard grade plasterboard on Resilient Bars set at 600mm centres

TEST ORGANISATION – Sound Research Laboratories Limited **REPORT / TEST No. / TEST DATE** – C/03/5L/0793/1 / Tests A2 and I2 / 22nd October 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

$D_{nT,w}$ (C ; C_{tr}) - 67 (-2 ; -6) dB

 $D_{nT,w} + C_{tr} - 61 dB$

L'_{nT,w} (C_I) - 45 (-1) dB

Floor Construction

- 150mm concrete beams (34kg/m) at 600mm centres with 100mm infill blocks (1950kg/m³) laid between. Beams built into inner leaf of cavity walls at each end with insitu concrete between. Precast edge beams built into inner leaf of cavity walls at side of floor.
- 50mm sand cement screed (2300kg/m³) laid over block work between beams to finish flush with top
 of beams. Nominal surface mass of floor was 300kg/m².
- 40mm Gyvlon levelling screed applied over a polyethylene slip sheet over 30mm Rockwool Rockfloor slabs with a perimeter strip of 30mm Rockwool Rockfloor.
- A ceiling comprising 12.5mm standard grade (Type 1) plasterboard fixed to resilient bars set at 600mm centres and fixed to 50mm x 50mm timber battens set at 600mm centres. 50mm mineral wool infill (16kg/m³) between timber battens.

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd. flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising 100mm brick / 50mm cavity / 100mm block (1100kg/m³) walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m². 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with two layers of 12.5mm sound resistant plasterboard fixed to a 48mm independent I stud frame.



SEPARATING FLOOR

ACOUSTIC TEST DATA SHEET

65mm sand / cement screed 30mm Rockwool Rockfloor

 $D_{nT.w} + C_{tr} - 57 dB$

150mm concrete beam and block floor (300kg/m²)

50mm x 50mm timber battens at 600mm centres with 50mm mineral wool in cavity 12.5mm standard grade plasterboard on Resilient Bars set at 600mm centres

TEST ORGANISATION – Sound Research Laboratories Limited REPORT / TEST No. / TEST DATE – C/03/5L/0793/1 / Tests A2 and I2 / 22nd October 2003 TEST METHOD - BS EN ISO 140-4 and 7: 1998 RESULTS

$D_{nT,w}$ (C ; C_{tr}) - 67 (-4 ; -10) dB

L'_{nT.w} (C_I) - 43 (3) dB

Floor Construction

- 150mm concrete beams (34kg/m) at 600mm centres with 100mm infill blocks (1950kg/m³) laid between. Beams built into inner leaf of cavity walls at each end with insitu concrete between. Precast edge beams built into inner leaf of cavity walls at side of floor.
- 50mm sand cement screed (2300kg/m³) laid over block work between beams to finish flush with top
 of beams. Nominal surface mass of floor was 300kg/m².
- 65mm sand / cement screed applied over a polyethylene slip sheet over 30mm Rockwool Rockfloor slabs with a perimeter strip of 30mm Rockwool Rockfloor.
- A ceiling comprising 12.5mm standard grade (Type 1) plasterboard fixed to resilient bars set at 600mm centres and fixed to 50mm x 50mm timber battens set at 600mm centres. 50mm mineral wool infill (16kg/m³) between timber battens.

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd. flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising 100mm brick / 50mm cavity / 100mm block (1100kg/m³) walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m². 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with two layers of 12.5mm sound resistant plasterboard fixed to a 48mm independent I stud frame.



SEPARATING FLOOR



40mm Gyvlon levelling screed Two layers of 5mm Ethafoam

150mm concrete beam and block floor (300kg/m²)

 $D_{nTw} + C_{tr} - 47 dB$

One layer of 12.5mm Lafarge dBcheck wallboard on MF system with 75mm cavity

TEST ORGANISATION - Sound Research Laboratories Limited

REPORT / TEST No. / TEST DATE - C/03/5L/0837/1 / Tests A7 and I7 / 9th & 10th December 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

D_{nT,w} (C ; C_{tr}) - 52 (-2 ; -5) dB

L'_{nT.w} (C_I) - 57 (0) dB

Floor Construction

- 150mm concrete beam and block floor (300kg/m²) built into cavity block walls on four sides.
- Where beams were running parallel to walls, tray blocks with insitu concrete were installed.
- Sand cement sealer coat brushed over floor surface and into joints between blocks and beams.
- Two layers of 5mm Ethafoam butt jointed and taped.
- 40mm Gyvlon levelling screed applied over a polyethylene slip-sheet with a perimeter strip of 8mm polyethylene foam.
- A ceiling comprising one layer of 12.5mm Lafarge dBcheck wallboard fixed to the MF ceiling system with a clear cavity of 75mm.

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

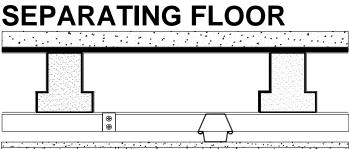
BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd., flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising cavity dense concrete block walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m².

Two leaves of 100mm dense concrete blocks with a 50mm cavity with wall ties at 600mm centres horizontally and 450mm vertically. 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with 12.5mm standard grade (Type 1) plasterboard fixed on plaster dabs.

Lafarge Gyvlon Ltd, Europa Boulevard, Westbrook, Warrington, WA5 7TN Phone: 01925 428780 Fax: 01925 428788 Email: <u>sales@gyvlon-floors.co.uk</u> www.gyvlon-floors.co.uk





40mm Gyvlon levelling screed Two layers of 5mm Ethafoam

150mm concrete beam and block floor (300kg/m²)

 $D_{nT,w} + C_{tr} - 49 \text{ dB}$

Two layers of 12.5mm Lafarge dBcheck wallboard on MF system with 75mm cavity

TEST ORGANISATION - Sound Research Laboratories Limited

REPORT / TEST No. / TEST DATE - C/03/5L/0837/1 / Tests A5 and I5 / 9th December 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

D_{nT,w} (C ; C_{tr}) - 54 (-2 ; -5) dB

L'_{nT,w} (C_I) - 55 (0) dB

Floor Construction

- 150mm concrete beam and block floor (300kg/m²) built into cavity block walls on four sides.
- Where beams were running parallel to walls, tray blocks with insitu concrete were installed.
- Sand cement sealer coat brushed over floor surface and into joints between blocks and beams.
- Two layers of 5mm Ethafoam butt jointed and taped.
- 40mm Gyvlon levelling screed applied over a polyethylene slip-sheet with a perimeter strip of 8mm polyethylene foam.
- A ceiling comprising two layers of 12.5mm Lafarge dBcheck wallboard fixed to the MF ceiling system with a clear cavity of 75mm.

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

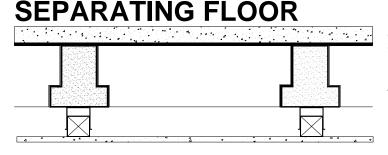
BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd., flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising cavity dense concrete block walls, a concrete beam and block first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m².

Two leaves of 100mm dense concrete blocks with a 50mm cavity with wall ties at 600mm centres horizontally and 450mm vertically. 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with 12.5mm standard grade (Type 1) plasterboard fixed on plaster dabs.

Lafarge Gyvlon Ltd, Europa Boulevard, Westbrook, Warrington, WA5 7TN Phone: 01925 428780 Fax: 01925 428788 Email: <u>sales@gyvlon-floors.co.uk</u> www.gyvlon-floors.co.uk





40mm Gyvlon levelling screed 6mm Isorubber Comfort

150mm concrete beam and block floor (300kg/m²)

Isosonic hanger with 48x48mm timber battens at 600mm centres (75mm cavity) 12.5mm standard grade plasterboard

TEST ORGANISATION - Sound Research Laboratories Limited

REPORT / TEST No. / TEST DATE - C/03/5L/0804/1 / Tests A1 and I1 / 3rd October 2003

TEST METHOD - BS EN ISO 140-4 and 7: 1998

RESULTS

 $D_{nT,w}$ (C ; C_{tr}) - 51 (-1 ; -4) dB

 $D_{nT,w} + C_{tr} - 47 dB$

L'_{nT,w} (C_I) - 61 (-3) dB

Floor Construction

- 150mm concrete beam and block floor (300kg/m²) built into cavity block walls on four sides.
- Where beams were running parallel to walls, tray blocks with insitu concrete were installed.
- Sand cement sealer coat brushed over floor surface and into joints between blocks and beams.
- One layer of 6mm Isorubber Comfort
- 40mm Gyvlon levelling screed applied over a polyethylene slip-sheet with a perimeter strip of 6mm Isorubber Comfort.
- A ceiling comprising 12.5mm standard grade (Type 1) plasterboard fixed to 48mm x 48mm timber battens set at 600mm centres in Isosonic hangers / stirrups (ceiling cavity 75mm).

The results show that this floor system, as tested in conjunction with the associated constructions detailed above, is able to achieve the sound insulation performance required in the Building Regulations 2000, Approved Document E, 2003 Edition.

If this floor system were to be used on site with an equivalent construction and same build quality, similar results would be expected.

BUILDING CONSTRUCTION DETAILS

Sound Research Laboratories Ltd. flanking transmission test laboratory at Holbrook House, Little Waldingfield, Sudbury, Suffolk. A two-storey purpose built test unit comprising cavity dense concrete block walls, a precast concrete first floor and a flat timber joist roof. Single rooms at ground and first floor level each approximately 25m³ with a separating floor area of 10m². Two leaves of 100mm dense concrete blocks with a 50mm cavity with wall ties at 600mm centres horizontally and 450mm vertically. 50mm Rockwool cavity closer (45kg/m³) running horizontally at the separating floor junction. Internal faces of block work finished with 12.5mm standard grade (Type 1) plasterboard fixed on plaster dabs.