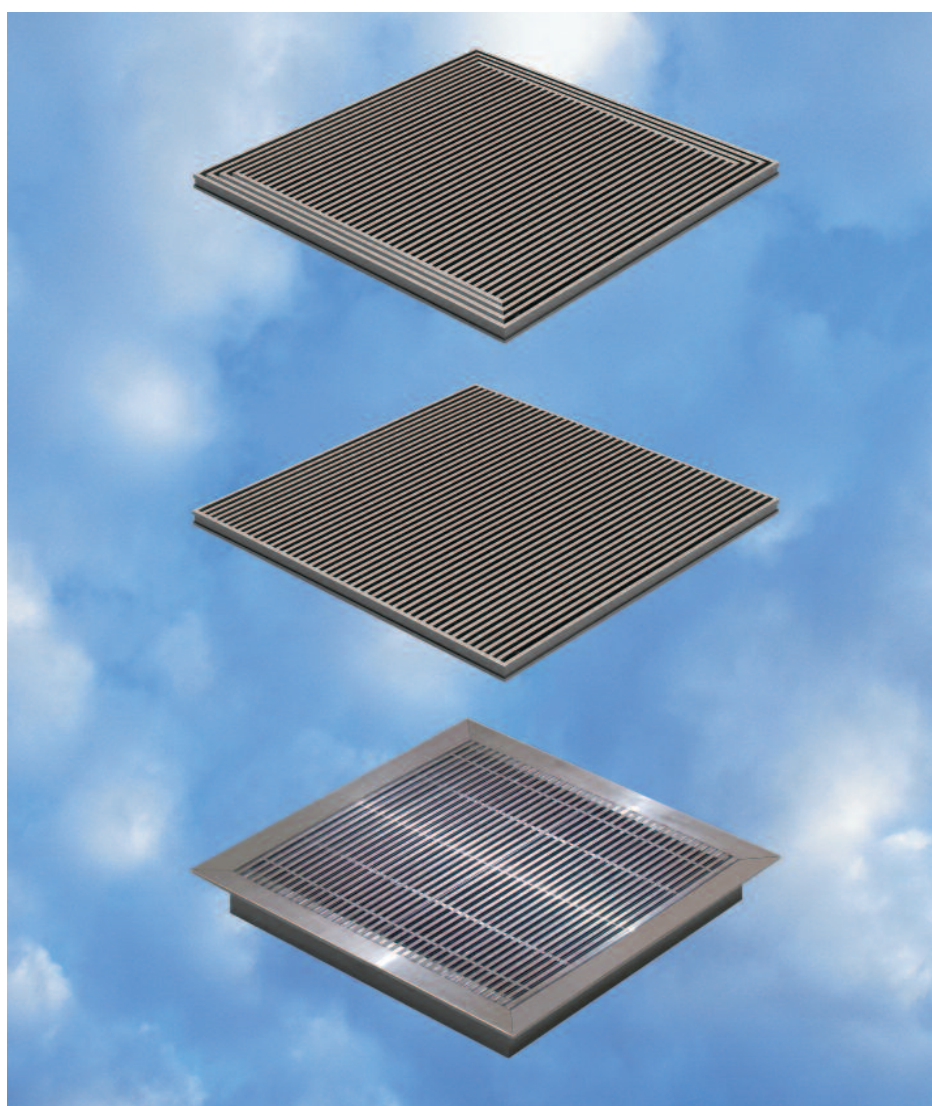


Panel Floor Grilles

Model LDA, MDA, HDA, PFS and F48

Features

- Model LDA – Light Duty Panel Floor Grille
- Model MDA – Medium Duty Panel Floor Grille
- Model HDA – Heavy / Extra Heavy Duty Panel Floor Grille
- Model PFS – Heavy / Extra Heavy Duty Floor Grille
- Model F48 – Heavy Duty Flanged Floor Grille



Air Diffusion

Grilles Diffusers Louvres Chilled Beams

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Contents

Model LDA

Light Duty Recess Mounting Panel Floor Grille, from extruded aluminium sections, suitable for square tile replacement in light traffic applications.

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Model MDA

Medium Duty Recess Mounting Panel Grille, from extruded aluminium sections, suitable for square tile replacement in medium traffic applications.

Pages 4 – 5

Model HDA

Heavy, Extra Heavy Duty Recess Mounting Panel Grille, from extruded aluminium sections, suitable for square tile replacement in heavy traffic applications.

Pages 6 – 7

Model PFS

Heavy, Extra Heavy Duty Recess Mounting Panel Grille, from extruded aluminium sections having a steel reinforced sub-frame, suitable for square tile replacement in heavy traffic applications.

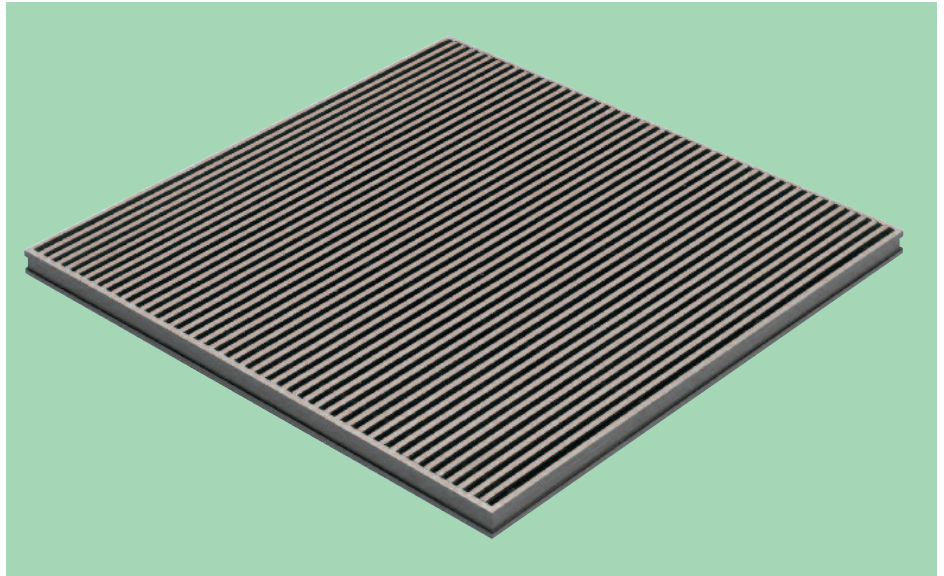
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F48

Heavy Duty Flanged Surface Mounting Floor Grille, constructed from extruded aluminium sections and having a 48mm wide flange, suitable for square tile replacement in heavy traffic applications

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Model LDA



Description

Model LDA light duty tile replacement panel floor grille is designed to withstand a light loading and or foot traffic. Constructed entirely from aluminium extrusions and having a reinforced frame combines strength with air distribution performance, ideal for use in most general residential premises, private houses and offices, general offices and elderly residences where no heavy equipment is present. Model LDA is suitable for use on either supply or extract systems and may be fitted with an optional opposed blade damper.

Testing

The grille has been successfully tested without collapse to comply with the specification and structural integrity requirements of British and European test standard BS EN 13264:2001, Light Duty classification.

Finish

Standard finish is brushed aluminium alternatively a black nylon coating or other colours are available. As a special option a Shadow Line finish is also available.

Dimensions

The standard floor grille size is 599mm x 599mm overall, to suit most manufacturers floor panel sizes. Other special sizes are also available.

Standard Installation Method

Each grille incorporates a recessed flange arrangement to allow installation via floor manufacturers raised floor jacks. To ensure a neat installation all grilles, including the final finish covering, are manufactured to match the overall thickness of the corresponding floor panels.

Relocation of the grille to another area is simply carried out by lifting and moving the entire floor grille to the desired new position.

For some projects it is a requirement for safety and insulation that the exposed surfaces of the panel floor grilles are black nylon coated. Other colours are available on request. Earthing terminals can also be supplied as an option.

Model Types

Model LDA-G is supplied as grille only.

Model LDA-R is supplied complete with an aluminium opposed blade damper, which is adjusted through the grille core.

Performance Guide and Application

Performance Guide

Volume (l/s)	Total Pressure (Pa)	Free Area Velocity (m/s)	Duct Velocity (m/s)	Noise Level (NR)
225	6	1.6	0.9	23
340	11	2.4	1.3	29
450	18	3.2	1.7	35
560	25	4.0	2.2	40
670	32	4.8	2.6	45

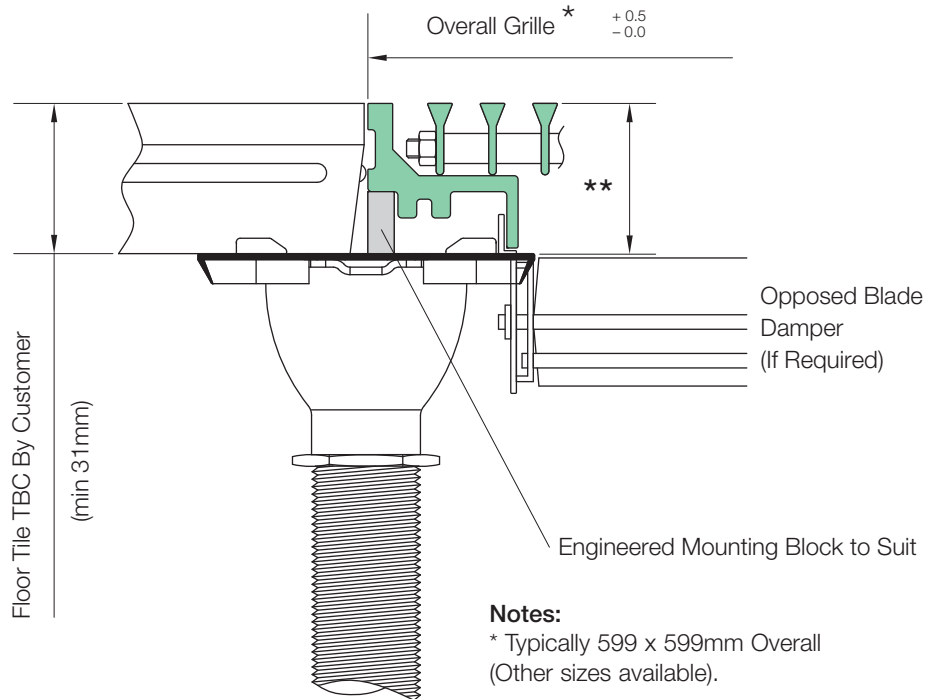
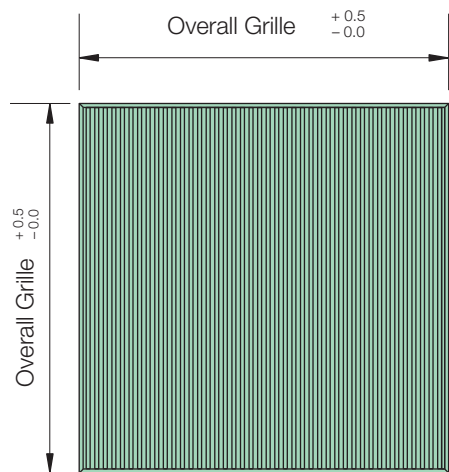
Based on 599 x 599 O/A grille size.

Notes: All figures shown include an Opposed Blade Damper set fully open. When no damper is required a reduction of both 2NR and 2Pa can be applied to the noise and pressure figures stated.

Application

Structural Class	Typical Application
Light	General office accommodation without heavy equipment, homes for the elderly
Load	1.5kN over 25mm x 25mm area

Dimension and Installation Information



Model LDA Illustrated.
Typically 599 x 599mm Overall
(Other sizes available).

Notes:
* Typically 599 x 599mm Overall
(Other sizes available).

Standard Ordering Procedure Example

Model	Fixing	Finish	Tile Depth	Size
LDA-G	F0	5	TBC mm	599 x 599mm
LDA-G without OBD	F0 No fixing	5 Standard Brushed Aluminium	Total Panel Thickness including Floor Covering	599mm x 599mm Overall (other sizes to special order)
LDA-R with OBD		94 Black Nylon Coating		

For special finishes please refer to our Sales Office

Important Note: All orders must be addressed to Air Diffusion, Ruskin Air Management Limited.

Model MDA

Description

Model MDA medium duty tile replacement panel floor grille is designed to withstand a medium loading and or foot traffic. Constructed entirely from aluminium extrusions and featuring a unique one piece, 'multi blade' mitred frame gives added strength with air distribution performance, ideal for use in most educational accommodation, data preparation and public areas or general office premises. Model MDA is suitable for use on either supply or extract systems and may be fitted with an optional opposed blade damper.

Testing

The grille has been successfully tested without collapse to comply with the specification and structural integrity requirements of British and European test standard BS EN 13264:2001, Medium Duty classification.

Finish

Standard finish is brushed aluminium alternatively a black nylon coating or other colours are available. As a special option a Shadow Line finish is also available.

Dimensions

The standard floor grille size is 599mm x 599mm overall, to suit most manufacturers floor panel sizes. Other special sizes are also available.

Standard Installation Method

Each grille incorporates a recessed flange arrangement to allow installation via floor manufacturers raised floor jacks. To ensure a neat installation all grilles are manufactured to match the overall thickness of the corresponding floor panels, including the final finish covering.

Relocation of the grille to another area is simply carried out by lifting and moving

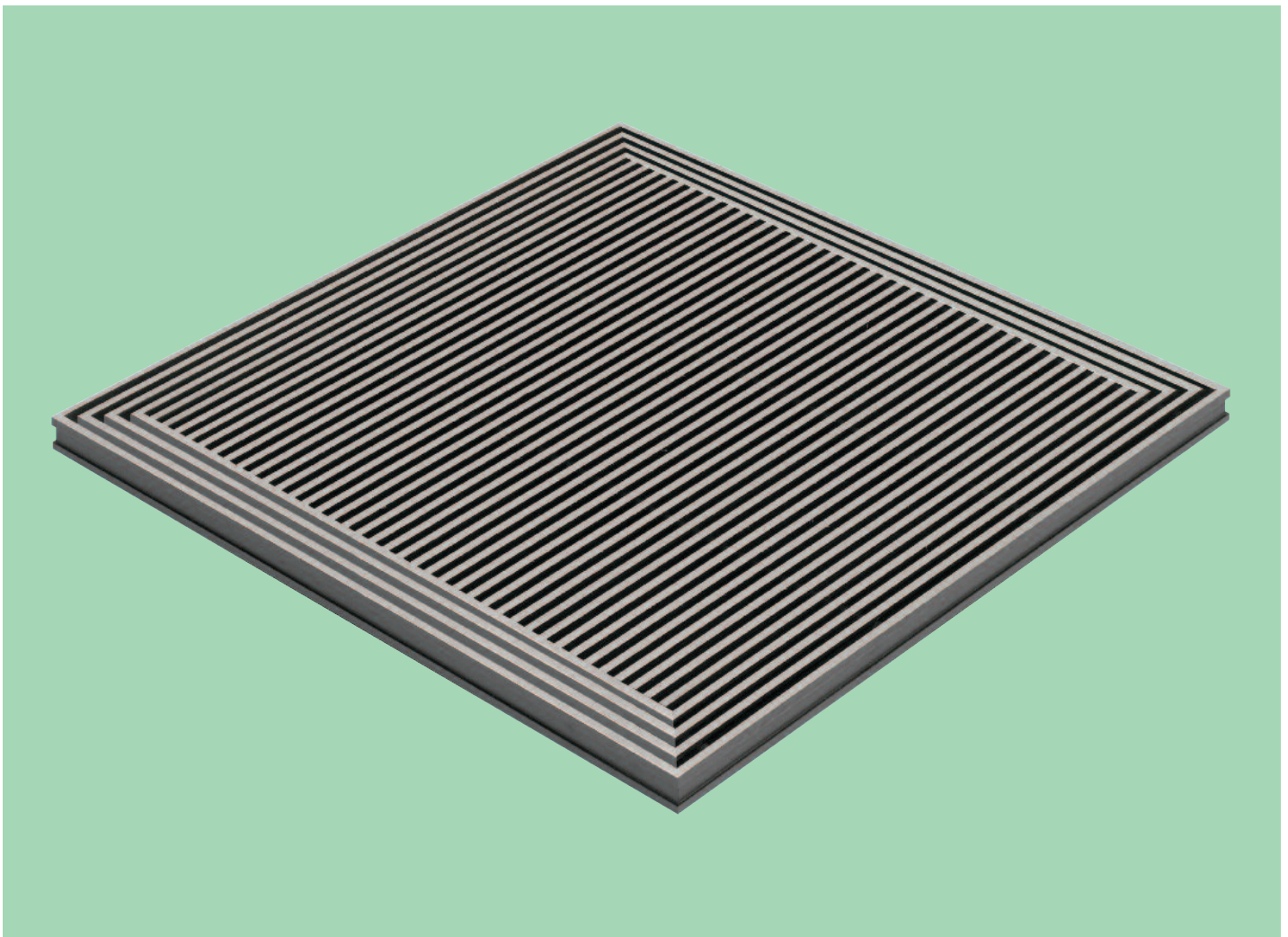
the entire floor grille to the desired new position.

For some projects it is a requirement for safety and insulation that the exposed surfaces of the panel floor grilles are black nylon coated. Other colours are available on request. Earthing terminals can also be supplied as an option.

Model Types

Model MDA-G is supplied as grille only.

Model MDA-R is supplied complete with an aluminium opposed blade damper, which is adjusted through the grille core.



Performance Guide and Application

Performance Guide

Volume (l/s)	Total Pressure (Pa)	Free Area Velocity (m/s)	Duct Velocity (m/s)	Noise Level (NR)
225	6	1.6	0.9	23
340	11	2.4	1.3	29
450	18	3.2	1.7	35
560	25	4.0	2.2	40
670	32	4.8	2.6	45

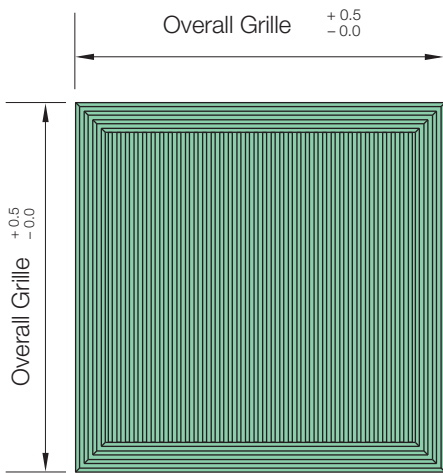
Based on 599 x 599 O/A grille size.

Notes: All figures shown include an Opposed Blade Damper set fully open. When no damper is required a reduction of both 2NR and 2Pa can be applied to the noise and pressure figures stated.

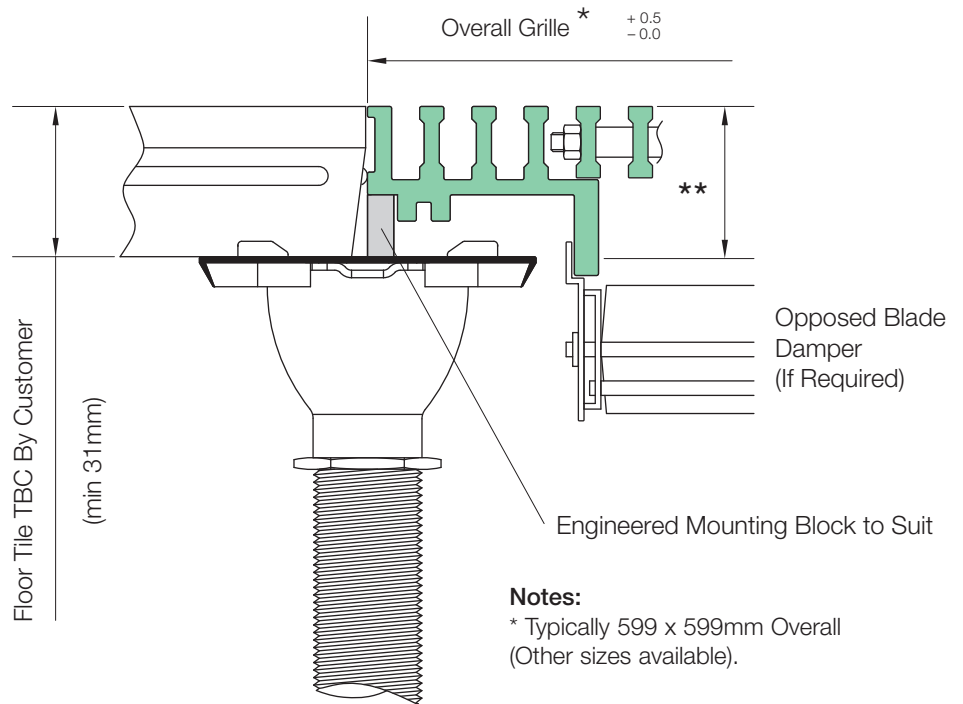
Application

Structural Class	Typical Application
Medium	General office accommodation where it is expected that heavy equipment will be used. Data preparation areas. Educational accommodation. Public areas.
Load	3.0kN over 25mm x 25mm area

Dimension and Installation Information



Model MDA Illustrated.
Typically 599 x 599mm Overall
(Other sizes available).



Notes:
* Typically 599 x 599mm Overall
(Other sizes available).

Standard Ordering Procedure Example

Model	Fixing	Finish	Tile Depth	Size
MDA-G	F0	5	TBCmm	599 x 599mm
MDA-G without OBD	F0 No fixing	5 Standard Brushed Aluminium	Total Panel Thickness including Floor Covering	599mm x 599mm Overall (other sizes to special order)
MDA-R with OBD		94 Black Nylon Coating		

For special finishes please refer to our Sales Office

Important Note: All orders must be addressed to Air Diffusion, Ruskin Air Management Limited.

Model HDA

Description

Model HDA heavy-duty tile replacement panel floor grille is designed to withstand heavy and extra heavy loadings. Constructed entirely from aluminium extrusions and featuring a unique one piece, 'multi blade' mitred frame provides extra strength with air distribution performance, ideal for use in computer rooms, telephone exchanges, public areas, control rooms and other special applications where heavy loadings are evident. Model HDA is suitable for use on either supply or extract systems and may be fitted with an optional opposed blade damper.

Testing

The grille has been successfully tested without collapse to comply with the specification and structural integrity requirements of British and European test standard BS EN 13264:2001, Heavy / Extra Heavy classification. In addition it

complies with the specification requirements of PSA MOB PF2 PS/SPU March 1992, including a rolling load test and also in accordance with T11 extra heavy-duty air grille test.

Finish

Standard finish is brushed aluminium alternatively a black nylon coating, or other colours are available. As a special option a Shadow Line finish may also be provided.

Dimensions

The standard floor grille size is 599mm x 599mm overall, to suit most manufacturers floor panel sizes. Other special sizes are also available.

Standard Installation Method

Each grille incorporates a recessed flange arrangement to allow installation via floor manufacturers raised floor jacks. To ensure a neat installation all grilles are

manufactured to match the overall thickness of the corresponding floor panels, including the final finish covering.

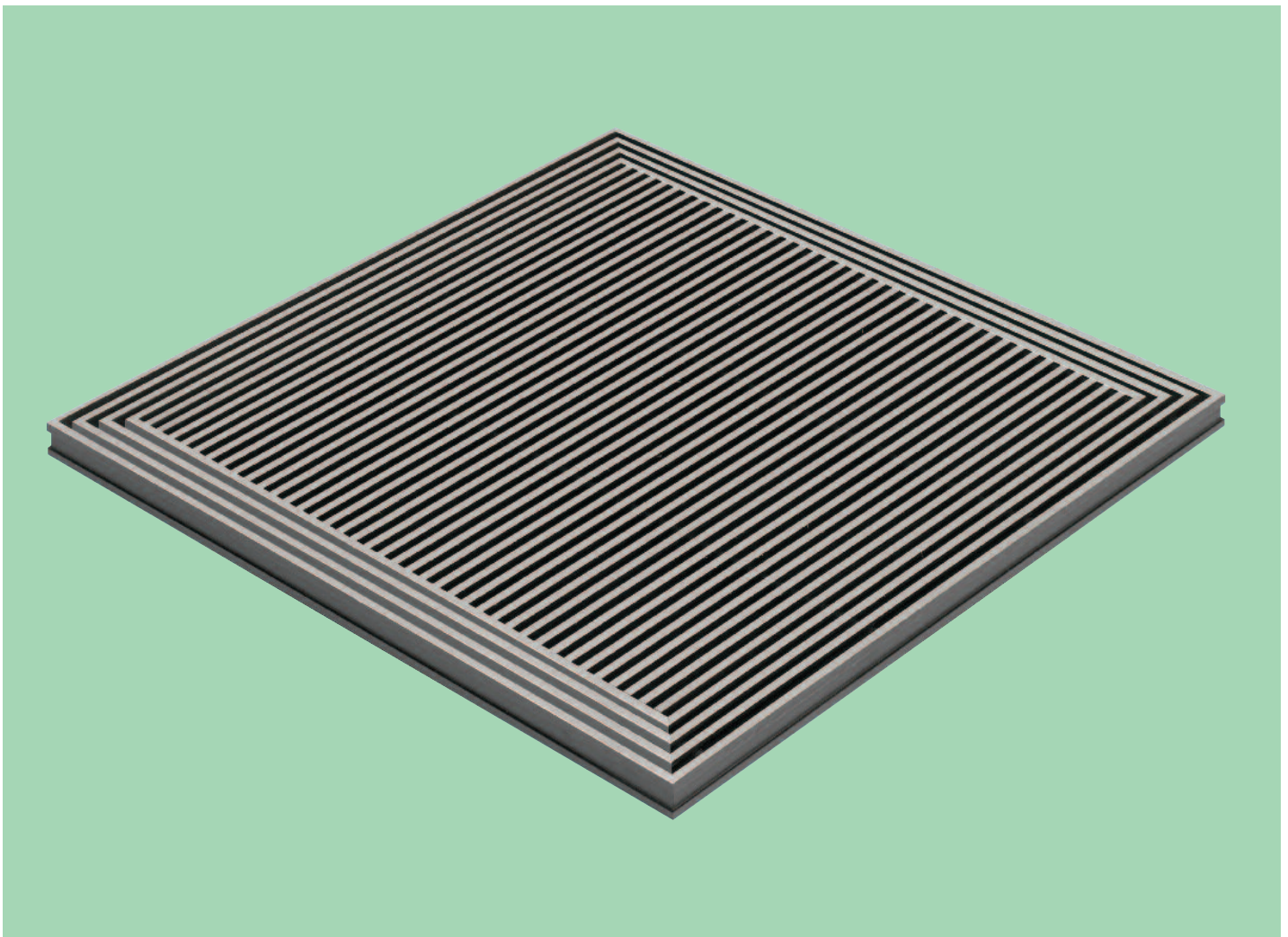
Relocation of the grille to another area is simply carried out by lifting and moving the entire floor grille to the desired new position.

For some projects it is a requirement for safety and insulation that the exposed surfaces of the panel floor grilles are black nylon coated. Other colours are available on request. Earthing terminals can also be supplied as an option.

Model Types

Model HDA-G is supplied as grille only.

Model HDA-R is supplied complete with an aluminium opposed blade damper, which is adjusted through the grille core.



Performance Guide and Application

Performance Guide

Volume (l/s)	Total Pressure (Pa)	Free Area Velocity (m/s)	Duct Velocity (m/s)	Noise Level (NR)
200	6	1.7	0.9	26
300	12	2.5	1.4	27
400	19	3.3	1.8	31
500	25	4.2	2.3	42
600	32	5.0	2.7	46
700	38	5.8	3.2	49

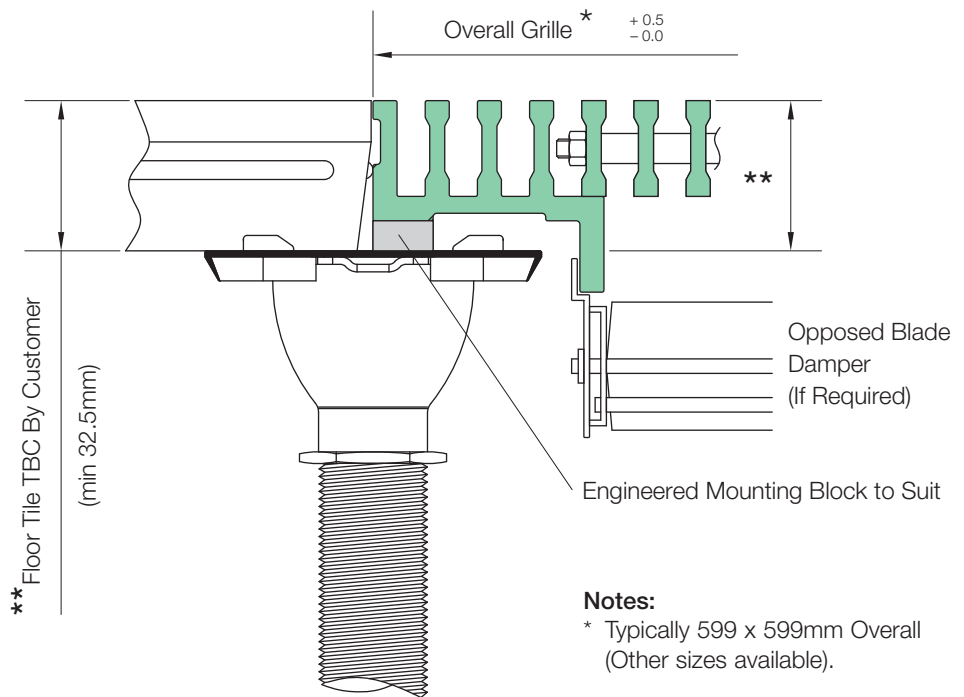
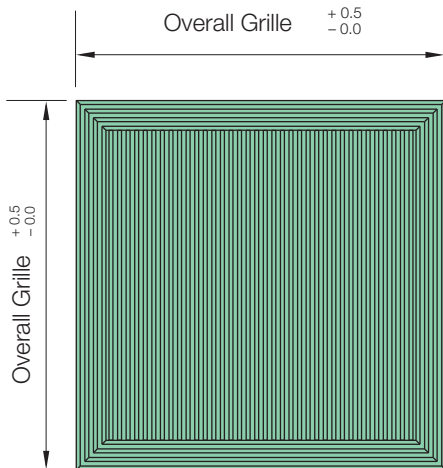
All Technical Data on 599 x 599mm Grille

Notes: All figures shown include an Opposed Blade Damper set fully open. When no damper is required a reduction of both 2NR and 2Pa can be applied to the noise and pressure figures stated.

Application

Structural Class	Typical Application
Heavy	Computer rooms, telephone exchanges, public areas, control rooms. Load 4.5kN over 25mm x 25mm area.
Extra Heavy	Computer rooms with heavy equipment and other special applications. Load 4.5kN over 25mm x 25mm area and 11.0kN over 4 off 25mm x 25mm area.

Dimension and Installation Information



Model HDA Illustrated.
Typically 599 x 599mm Overall
(Other sizes available).

Notes:
* Typically 599 x 599mm Overall
(Other sizes available).

Standard Ordering Procedure Example

Model	Fixing	Finish	Tile Depth	Size
HDA-G	F0	5	TBC mm	599 x 599mm
HDA-G without OBD	F0 No fixing	5 Standard Brushed Aluminium	Total Panel Thickness including Floor Covering	599mm x 599mm o/all (other sizes to special order)
HDA-R with OBD		94 Black Nylon Coating		

For special finishes please refer to our Sales Office

Important Note: All orders must be addressed to Air Diffusion, Ruskin Air Management Limited.

Model PFS

Description

Model PFS heavy-duty tile replacement panel floor grille is designed to satisfy heavy load requirements. Constructed from aluminium extrusions and reinforced with a steel sub-frame ensures positive high load strength and is therefore appropriate for most computer room installations.

Model PFS is suitable for use on either supply or extract systems and may be fitted with an optional opposed blade damper.

Testing

The Model PFS has been successfully tested to the specification requirements of MOB PF2.PS Appendix B. January 1990, which includes a rolling load. This generally complies with the load requirements of the Property Group Design Guide of IBM (UK).

Finish

Standard finish is brushed aluminium, alternatively a black nylon coating, or other colours are available. As a special option a Shadow Line finish may also be provided.

Dimensions

The standard floor grille size is 599mm x 599mm overall, to suit most manufacturers floor panel sizes. Other special sizes are also available.

Standard Installation Method

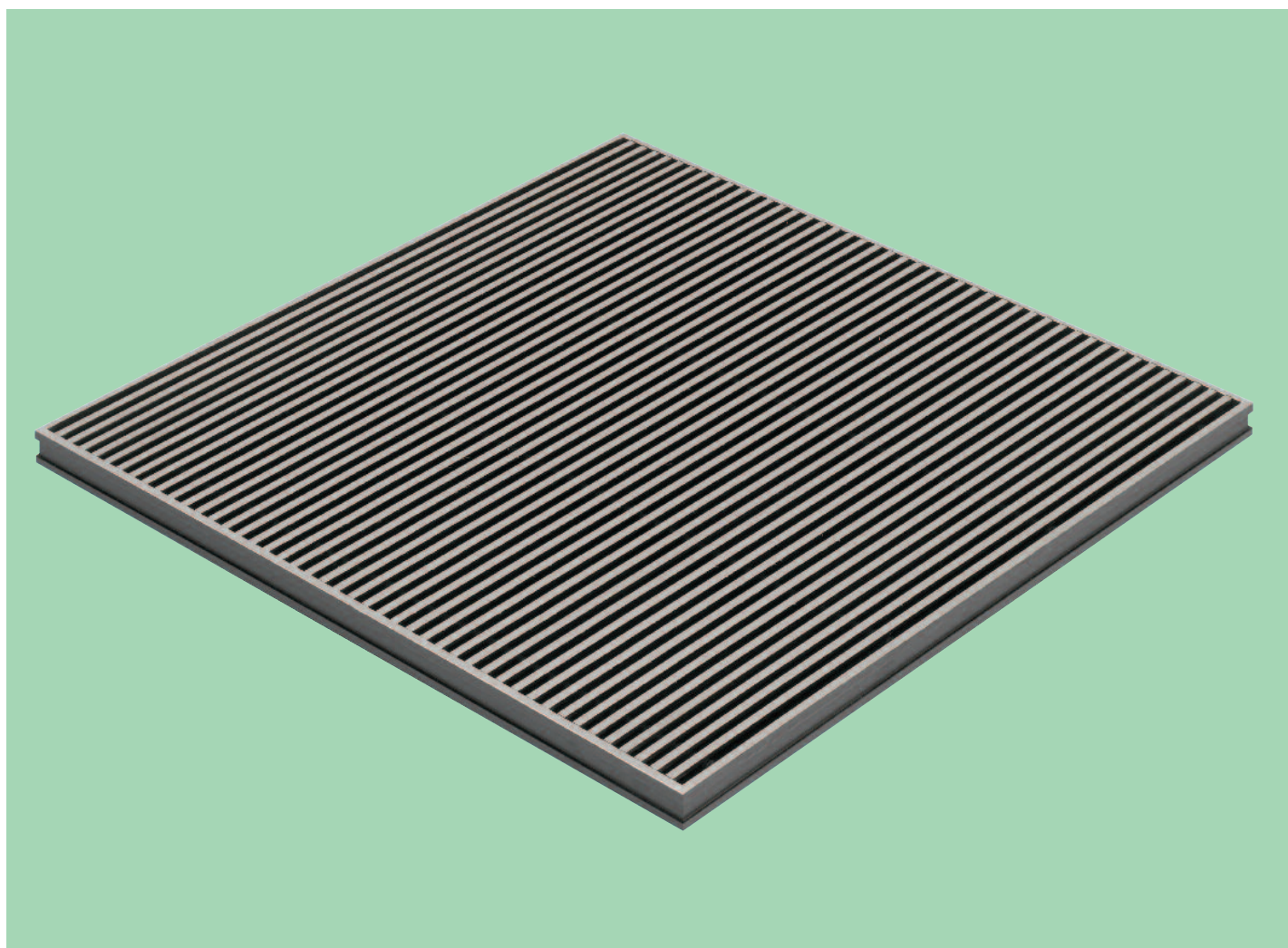
Each grille incorporates a recessed flange arrangement to allow installation via floor manufacturers raised floor jacks. To ensure a neat installation all grilles, including the final finish covering, are manufactured to match the overall thickness of the corresponding floor panels.

Relocation of the grille to another area is simply carried out by lifting and moving the entire floor grille to the desired new position.

Model Types

Model PFS-G is supplied as grille only.

Model PFS-R is supplied complete with an aluminium opposed blade damper, which is adjusted through the grille core.



Performance Guide and Application

Performance Guide

Volume (l/s)	Total Pressure (Pa)	Free Area Velocity (m/s)	Duct Velocity (m/s)	Noise Level (NR)
200	6	1.7	0.9	26
300	12	2.5	1.4	27
400	19	3.3	1.8	31
500	25	4.2	2.3	42
600	32	5.0	2.7	46

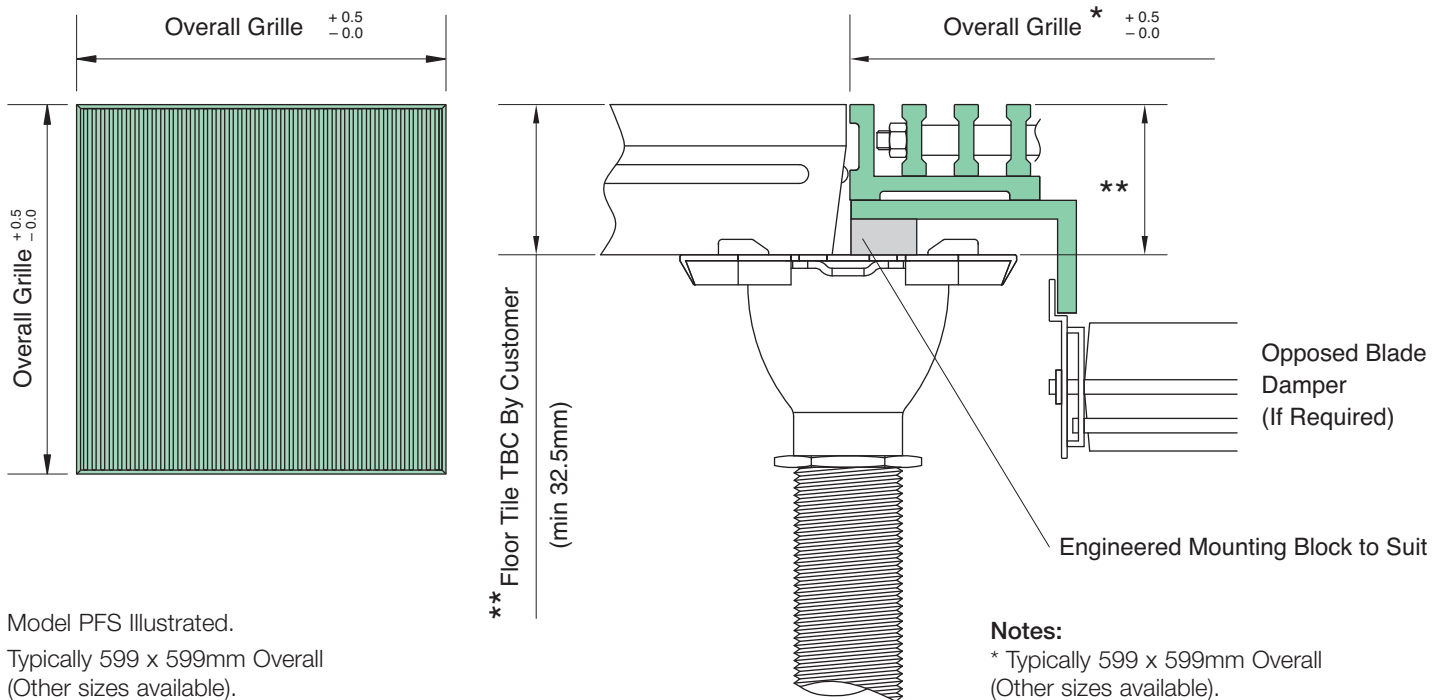
Based on standard blade pitch Model PFS provides a free area of 0.125m²

Notes: All figures shown include an Opposed Blade Damper set fully open. When no damper is required a reduction of both 2NR and 2Pa can be applied to the noise and pressure figures stated.

Application

Structural Class	Typical Application
Heavy	Computer rooms, telephone exchanges, public areas, control rooms. Load 4.5kN over 25mm x 25mm area.
Extra Heavy	Computer rooms with heavy equipment and other special applications. Load 4.5kN over 25mm x 25mm area and 11.0kN over 4 off 25mm x 25mm area.

Dimension and Installation Information



Model PFS Illustrated.
Typically 599 x 599mm Overall (Other sizes available).

Standard Ordering Procedure Example

Model	Fixing	Finish	Tile Depth	Size
PFS-G	F0	5	TBC mm	599 x 599mm
PFS-G without OBD	F0 No fixing	5 Standard Brushed Aluminium	Total Panel Thickness including Floor Covering	599mm x 599mm Overall (other sizes to special order)
PFS-R with OBD		94 Black Nylon Coating		

For special finishes please refer to our Sales Office

Important Note: All orders must be addressed to Air Diffusion, Ruskin Air Management Limited.

Model F48 Specification

Description

Model F48 medium/heavy duty tile replacement flanged panel floor grille is designed to satisfy medium/heavy load requirements. Constructed from heavy gauge aluminium extrusions having a 48mm wide flange frame. Most common use is in office areas to suit edge seamed floors where an overlapping flange is required. Model F48 is suitable for use on either supply or extract systems and may be fitted with an optional opposed blade damper.

Testing

The grille has been successfully tested without collapse to comply with the specification and structural integrity requirements of British and European test standard BS EN 13264:200, Heavy classification.

Finish

Standard finish is brushed aluminium, alternatively a black nylon coating, or other colours are also available. As a special option a Shadow Line finish may also be provided.

Dimensions

The standard floor grille size is 599mm x 599mm over flange (+0.5 – 0.0mm), to suit an overall floor depth of 6.4mm. Please note flange width is 48mm. Other special sizes are also available.

Standard Installation Method

Each grille incorporates a recessed flange arrangement to allow drop in tile replacement installation via stringers supported on floor manufacturers raised floor jacks, typically to suit a "Tate" style floor panel. All grilles are manufactured to a panel depth of 6.4mm. To ensure a neat

installation this thickness must correspond with the adjacent floor panels, including the final finish covering. (All fixings and floor jacks by others).

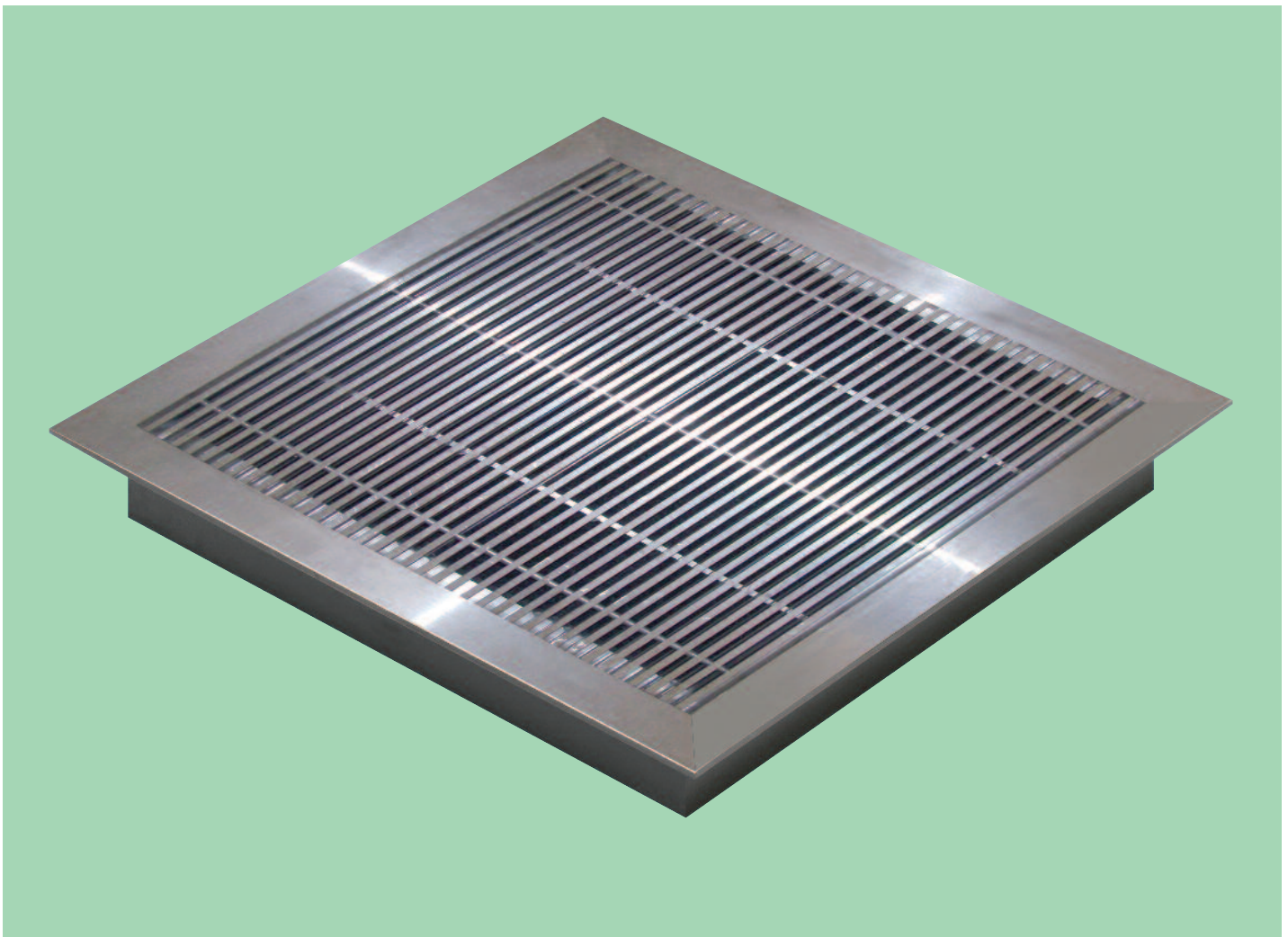
Relocation of the grille to another area is simply carried out by lifting and moving the entire floor grille to the desired new position.

For some projects it is a requirement for safety and insulation that the exposed surfaces of the panel floor grilles are black nylon coated. Other colours are available on request. Earthing terminals can also be supplied as an option.

Model Types

Model F48-G is supplied as grille only.

Model F48-R is supplied complete with an aluminium opposed blade damper, which is adjusted through the grille core.



Application and Performance Guide

Performance Guide

Volume (l/s)	Total Pressure (Pa)	Free Area Velocity (m/s)	Duct Velocity (m/s)	Noise Level (NR)
180	6	1.6	0.9	23
270	11	2.4	1.3	29
350	18	3.2	1.7	35
440	25	4.0	2.2	40
530	32	4.8	2.6	45

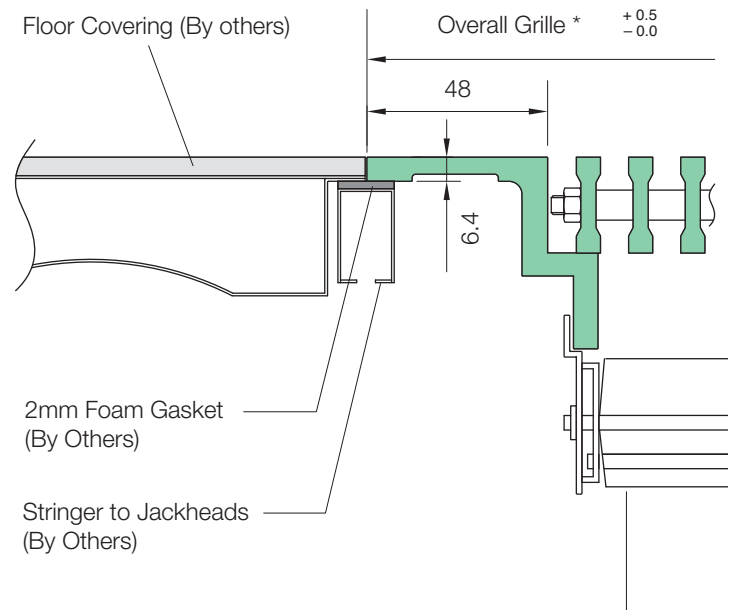
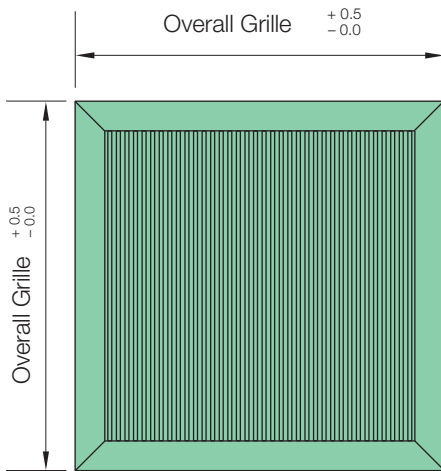
Application

Structural Class	Typical Application
Heavy	Computer rooms, telephone exchanges, public areas, control rooms.
	Load 4.5kN over 25mm x 25mm area.

Note:

All figures shown include an Opposed Blade Damper set fully open.
When no damper is required a reduction of both 2NR and 2Pa can be applied to the noise and pressure figures stated.

Dimension and Installation Information



Opposed blade damper (if required)

Model F48 Illustrated.
Typically 599 x 599mm Overall
(Other sizes available).

Standard Ordering Procedure Example

Model	Fixing	Finish	Tile Depth	Size
F48-G	F0	5	6.4mm	599 x 599mm over flange
F48-G without OBD	F0 No fixing (Plain un-drilled flange)	5 Standard Brushed Aluminium	6.4mm to suit standard overall panel depth including floor covering	599mm x 599mm (+0.5 – 0.0mm) over flange. (Other sizes to special order)
F48-R with OBD		94 Black Nylon Coating		
		Colour For special finishes please refer to our Sales Office		

Important Note: All orders must be addressed to Air Diffusion, Ruskin Air Management Limited.

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is a BS EN ISO 9000 registered
company.**

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Due to a policy of continuous product development the specification and details contained herein are subject to alteration without prior notice.

**Comprehensive and detailed information
is available for all Air Diffusion products.
Visit our website at www.air-diffusion.co.uk**

Ruskin Air Management Limited



Stourbridge Road, Bridgnorth, Shropshire,
WV15 5BB England.
Tel: 01746 761921
Fax: 01746 760127
Email: sales@air-diffusion.co.uk
Website: www.air-diffusion.co.uk

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