

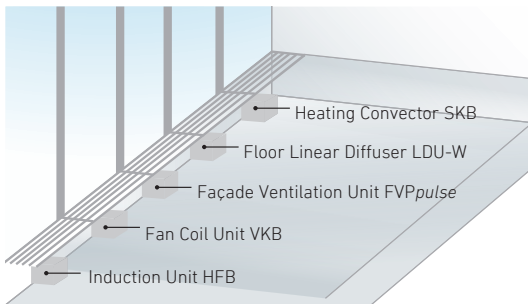
Technical Brochure

LTG Air-Water Systems

LTG Decentral LTG Induction LTG FanPower

LTG SystemDesign

system
design



Flexible in-floor technology with a uniform appearance

Technical brochure • LTG SystemDesign

LTG Comfort Air Technology

Air-Water Systems



Air Diffusers

Air Distribution

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Notes

The dimensions in this technical brochure are given in mm.

The general tolerances specified in DIN ISO 2768-vL apply to the dimensions given in this brochure.

Any additional details are provided in the drawings.

The special tolerances specified on the drawing apply to the air outlet grille.

Straightness and warpage tolerances for extruded aluminium profiles – in accordance with DIN EN 12020-2.

The surface finish has been designed for use in buildings – indoor climate in accordance with DIN EN 13779. Other requirements available on request.

The current tender documents are available in Word format from your local branch or at www.LTG-AG.com.

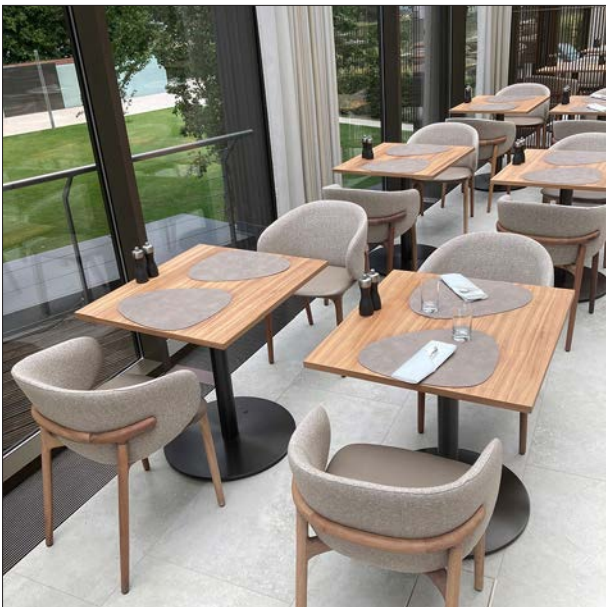
LTG Planning Tools – we're here to help!

Visit our website at www.LTG-AG.com to find helpful tools such as design programmes, flow videos and all product information!

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Flexible in-floor technology with a uniform appearance

Appearance and spatial impact are largely determined by the architecture. The LTG SystemDesign offers the possibility of implementing various technical solutions for indoor climate control in different areas of a building, all under a visually uniform floor grille design.

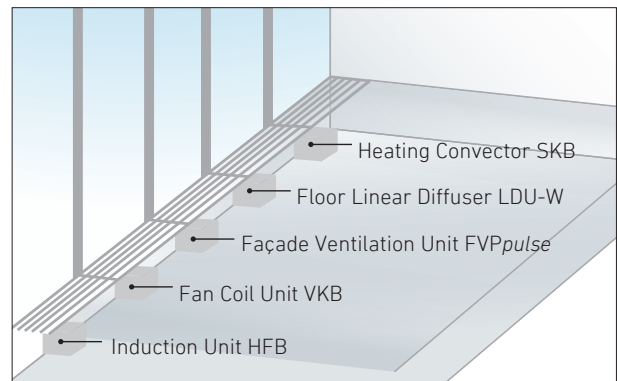


Products featuring the LTG SystemDesign

LTG air-water systems and air diffusers for floor installation, such as HFB, VKB, FVPpulse, LDU-W and SKB.

Construction

All units are designed to meet the requirements of a modular office building system with standard building grid lines (1.35 m) for flexible room layout and are compatible with other system components (e.g. 600 x 600 mm panels).



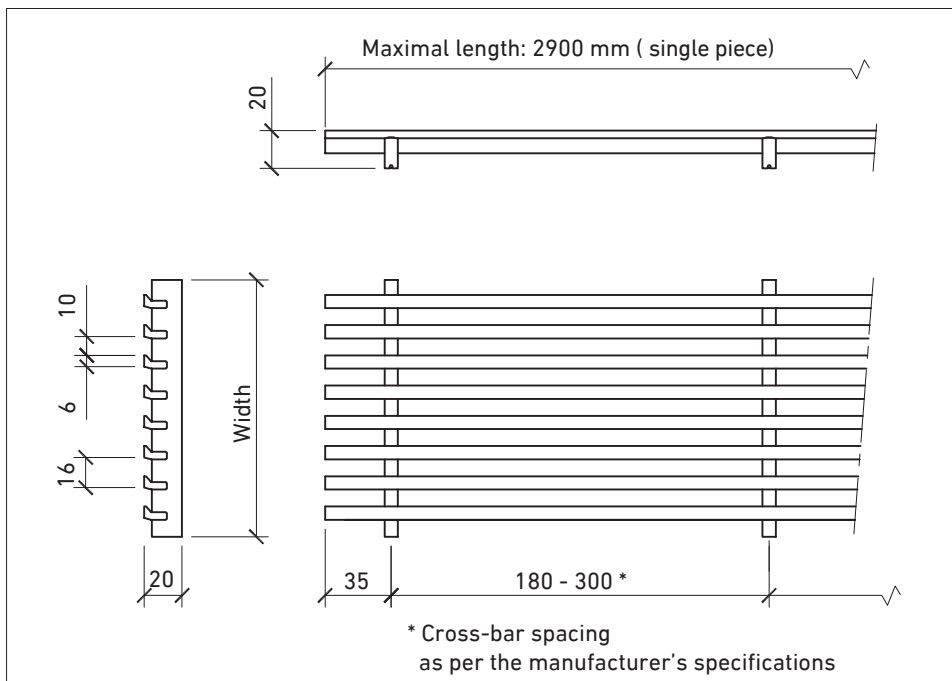
Dimensions

Grille		for product
Height [mm]	Width [mm]	
20	200	VKB-S, SKB-H/200, SKB-L/200, LDU-W/S
	320	LDU-W, LDU-W/H, VKB-0/.../FQ, VKB-N, HFB-0, SKB-320, SKB-L/320, FVP-B
	345	VKB-0/.../FL with additional linear primary air diffuser

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LTG LGA linear grille, made from aluminium

Standard: natural anodised, walkable,
60% free cross-section



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LTG LGA linear grille, made of aluminium

Optional at extra cost: special anodised colours



E6/C35 (black)

E6/C33 (medium bronze)

E6/EV2 (light gold)

CNS-M (stainless steel finish)

E6/EV1 = natural anodised

**Powder coatings / thermoset coatings in various RAL or NCS colours
as selected by the client / architect**



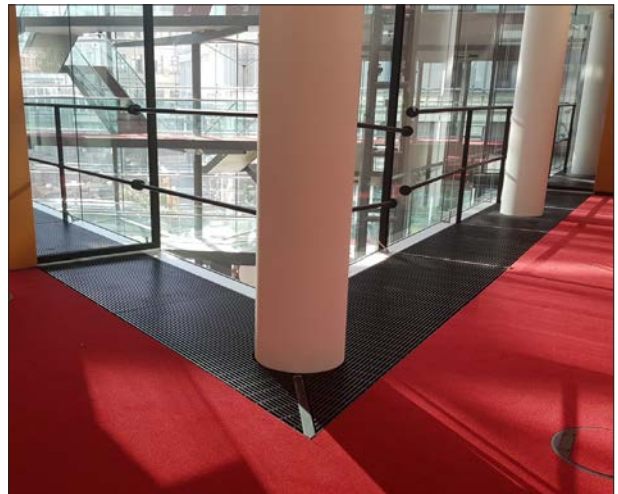
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LTG recommendation: LGA aluminium linear grille

The curved slats of the LTG aluminium linear grille LGA are, as standard, oriented towards the façade. This feature offers several advantages:

- Privacy and visual protection from the room into the unit
- Optimal distribution of conditioned supply air across the façade to provide thermal shielding for the occupied area against external heat loads and to decouple it from glass façades that radiate cold or heat
- Optimal flow conditions for the formation of a fan-shaped LTG mixed/displacement flow, ensuring maximum comfort in the occupied area.

Special designs with mitre cuts and/or column cut-outs are available



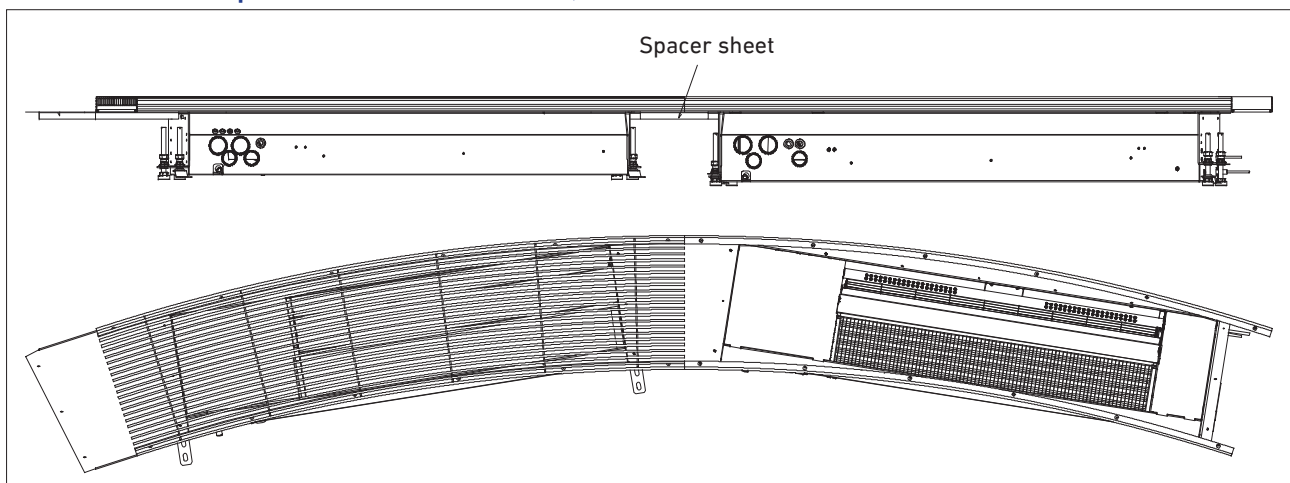
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LTG LGA linear grille, made of aluminium

Round version (on request)

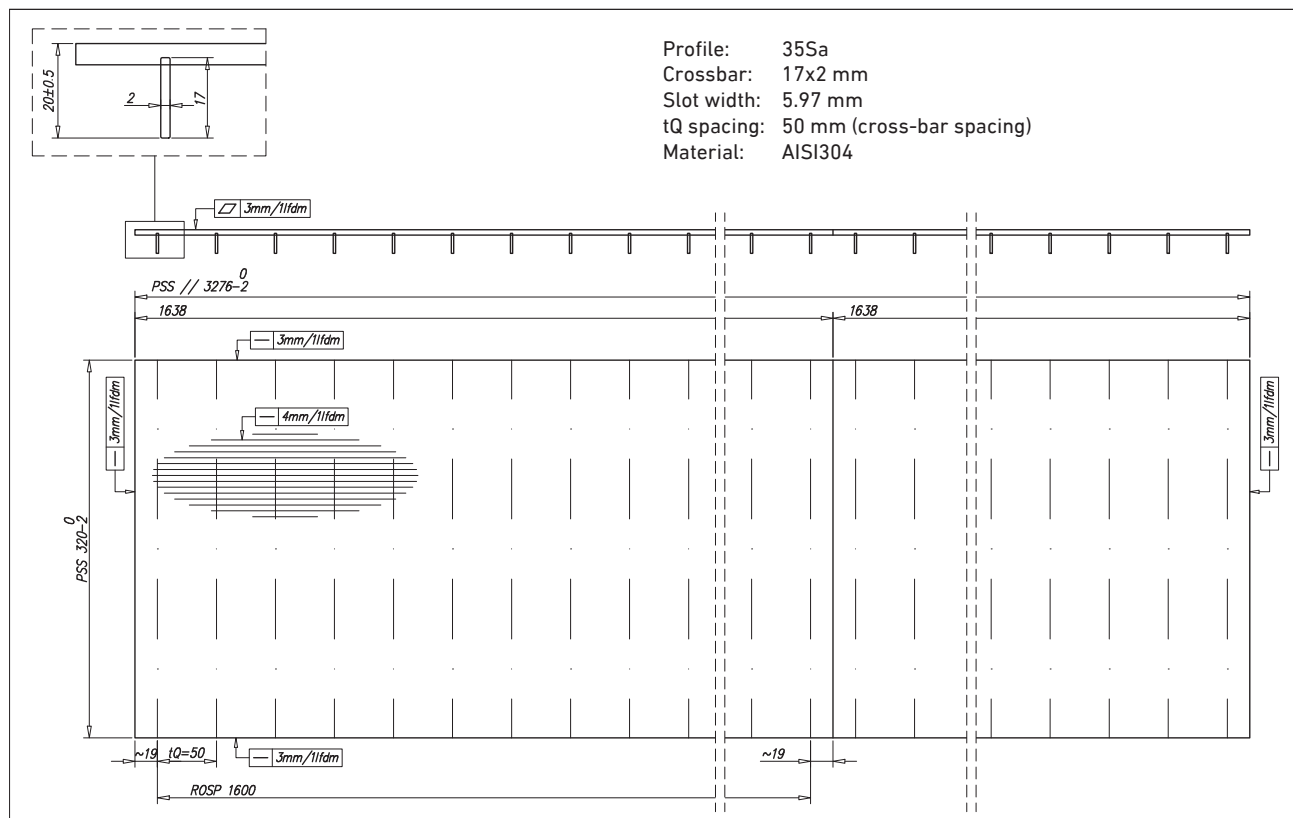


Installation example for installation in line, round version



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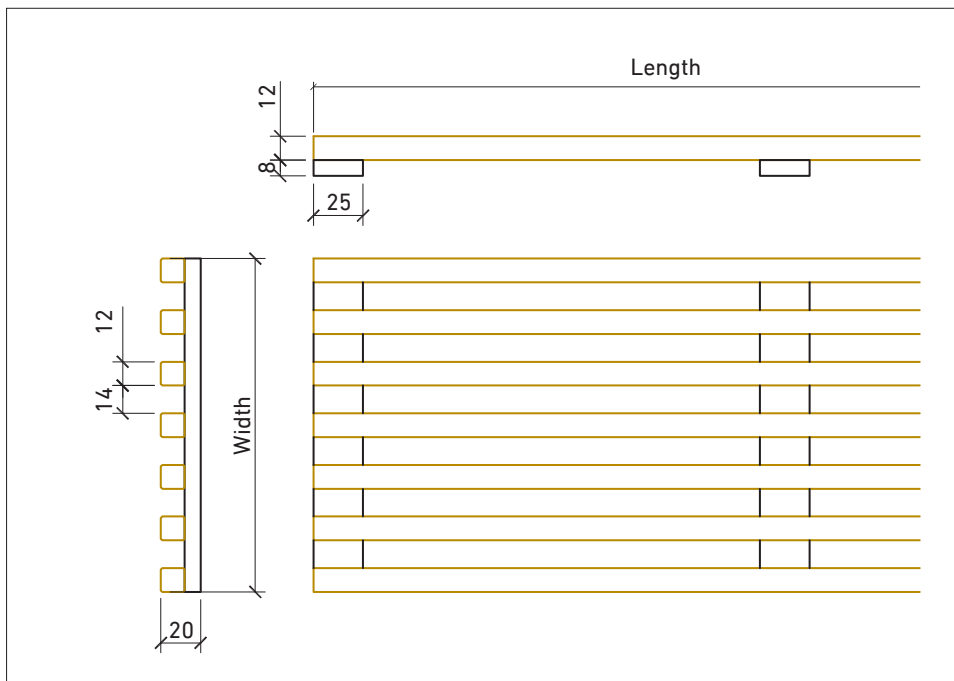
LTG LGE linear grille, made from stainless steel



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LTG LGH linear grille, made from wood

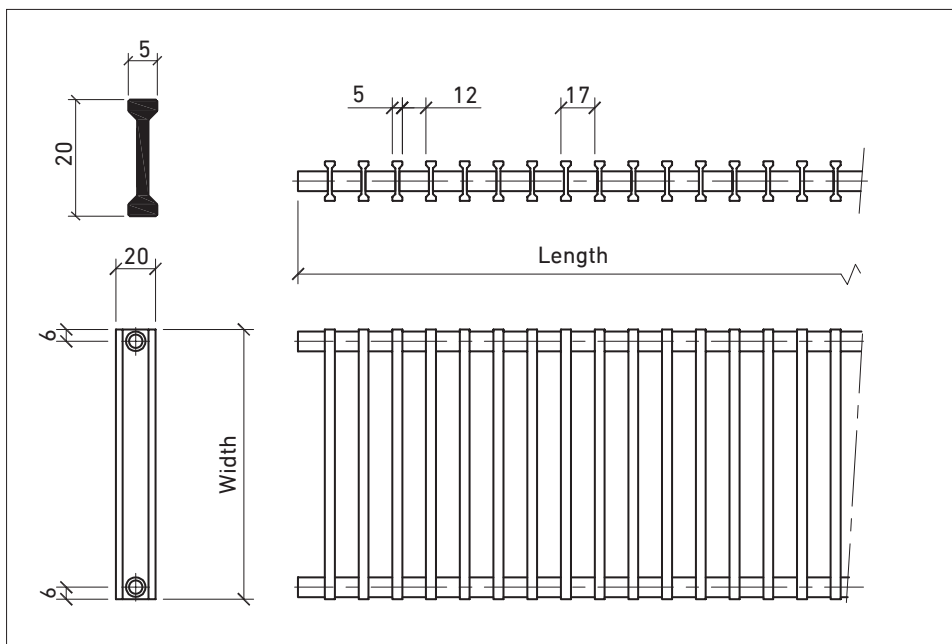
Walk-on ventilation grille with slats running lengthways and a free cross-section of approx. 50 %, available in various types of wood on request.



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LTG QGA cross-bar grille, made from aluminium

- Available in various anodised colours; standard finish is natural anodised
- Walkable, with transverse profile bars, roll-up design, made of aluminium (AlMgSi0.5)
- Bar dimensions 20 x 5 mm
- The profiled bars are connected using galvanised steel springs
- The bar spacing is exactly 12 mm (70% free cross-section), achieved using aluminium spacer sleeves (natural or black anodised)
- The grille must be ordered to the exact length; cutting to length on site is difficult. Lengths up to a maximum of 4.0 m



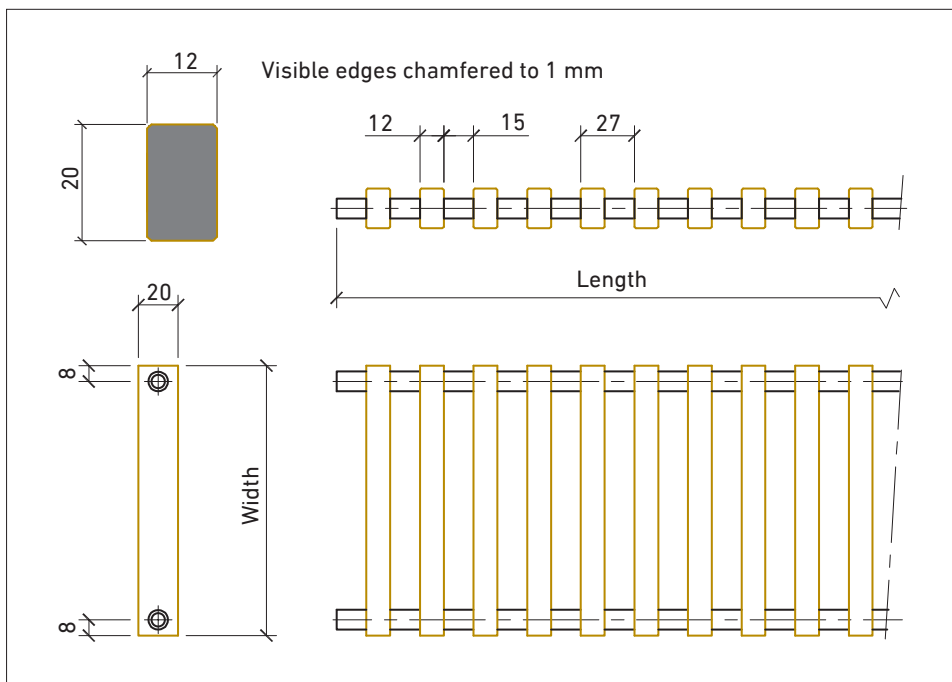
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LTG QGH cross-bar grille (roll-up grille), made from wood

Walk-on ventilation grille with a clear cross-section of 55%. Other timber species available on request.



Eiche = Oak
Buche = Beech
Ahorn = Maple
Kirschbaum = Cherry tree



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Load-bearing capacity

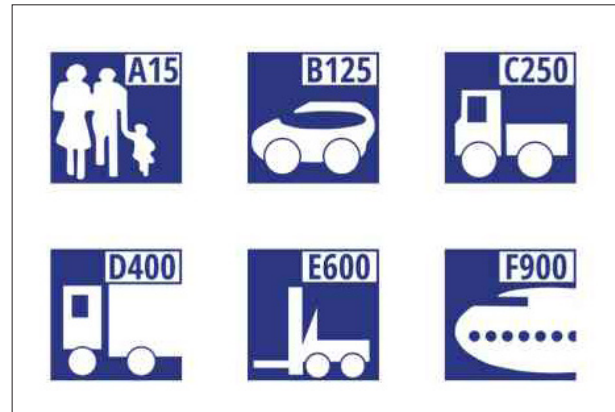
Rated in accordance with the standard for external shafts DIN EN 124 – Class A15

Definition of installation locations in accordance with DIN EN 124

The appropriate class of covers and extensions depends on the installation location. The various installation locations have been divided into groups numbered 1 to 6, as listed below. The illustration shows the position of some of these groups within the context of a road. For each group, the class of manhole covers or inserts that should be used is indicated in brackets as a guideline. The choice of the appropriate class is left to the user/designer. In case of any doubt, the next higher class should be selected.

Loads Class A 15

Traffic areas that may only be used by pedestrians and cyclists.



Test force 15 kN (1.5 tonnes)

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Nomenclature, order code

LGA / 20 / 320x1000 / E6EV1 / -

(1) (2) (3) (4) (5) (6)

(1) Type	LGA	=	Aluminium linear grille
	LGE	=	Stainless steel linear grille
	LGH	=	Wooden linear grille
	QGA	=	Aluminium cross-bar grille
	QGH	=	Wooden cross-bar grille
(2) Grille height	20	=	20 mm (standard, other types available on request)
(3) Width	200	=	For VKB-S, SKB-H/200, SKB-L/200, LDU-W/S
	320	=	For LDU-W, LDU-W/H, VKB-0/FQ, VKB-N, HFB-0, SKB-320, SKB-L/320, FVP-B
	345	=	For VKB-0/FL with additional linear primary air diffuser
(4) Length	...	=	From 300 mm to 2500 mm
(5) Material / Surface	E6/EV1	=	Standard natural anodised (LGA and QGA only)
	CNS-M	=	Stainless steel finish (LGA and QGA only)
	E6/EV2	=	Special light gold anodised finish (LGA and QGA only)
	E6/C33	=	Special anodised finish, medium bronze (LGA and QGA only)
	E6/C35	=	Special anodised finish, black (LGA and QGA only)
	PG...	=	Glossy powder-coated in accordance with RAL... /NCS..., RAL/NCS colour to be specified (LGA and QGA only)
	V2A	=	LDE stainless steel grille only
	Oak	=	
	Beech	=	
	Maple	=	Wooden grilles only (LGH and QGH)
	Cherry	=	
	Special	=	All grilles, on request
(6) Spacers	-	=	Excluded – for all LG models
	G	=	Aluminium colours (QGA and QGH only)
	S	=	Black (QGA and QGH only)

Comfort Air Technology

Air-Water Systems
Air Diffusers
Air Distribution

Process Air Technology

Fans
Filtration Technology
HumidificationTechnology

Engineering Services

Laboratory Test & Experiment
Field Measurement & Optimisation
Simulation & Expertise
R&D & Start-up

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