Brakel® Estra

Transparent louver ventilator

The Estra is a transparent louver system which is fitted vertically, and is suitable for both daily ventilation and smoke & heat extraction. The Estra's aesthetic and sleek design means that it really comes into its own in projects featuring substantial amounts of glass. The Estra has thermally separated profile sections, and is available with either single or double glazing. The choice of louvers available includes point-fixed, circumferentially framed and (semi-)structural glazing. Fields of application: atriums, shopping centres, industrial buildings and offices.

EN 12101-2

CE

Green Building Products

As a leading partner in its field, Brakel endeavours to remain a forerunner in the area of corporate social responsibility. Given that with our products, we let in the best that nature has to offer, it is only natural that we also care greatly for the environment. We therefore seek to integrate sustainable solutions in our working methods, products and services, wherever possible.

We have categorised our highly extensive product range according to the levels of sustainability and comfort applicable. The many energy efficient products and systems in the range can be recognised by the butterfly icons that they bear.

We classify our products, ranging from functional to sustainable, as follows:

(F)	functionally applicable in accordance with current qualifications / standards
(butterfly)	compliant with raised sustainability requirements
(butterfly)(butterfly)	compliant with high sustainability requirements
(butterfly)(butterfly)(butterfly)	entirely in keeping with a sustainable solution

Estra

The Estra is a transparent louver system which is fitted vertically, and is suitable for both daily ventilation and smoke & heat extraction. The entire Estra range is both functional and sustainable, while it has an aesthetic yet and sleek appearance.

Single glass center pivoted

Estra EG	Sustainability: (F)

- Single toughened glass thickness 6 / 8 / 10 / 12 mm Optional laminated glass 12 mm
- Center pivoted
- Overlapping
- Max. width per element:
  - 1500 mm (6 / 8 / 10 mm)
  - 1650 mm (12 mm)
- EN 12101-2 certified

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Single glass point-fixed

Estra EG Point-Fix

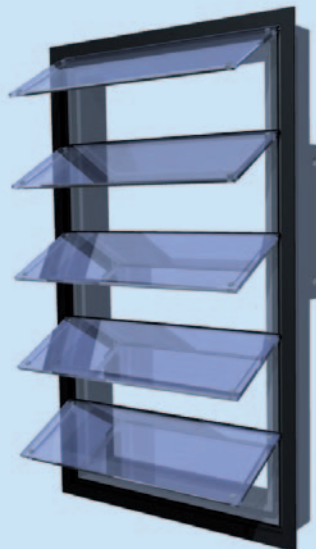Sustainability:

- Single toughened / laminated glass thickness 12 mm
- Center pivoted
- Overlapping / Flush connection
- Max. width per element: 1650 mm

Single glass top hinge

Estra EG Top

Sustainability:

- Single toughened / laminated glass thickness 10 / 12 mm
- Top hinge
- Overlapping / Flush connection
- Max. width per element: 1200 mm

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Double glazed top hinge

Estra TG Top

Sustainability:

- Thermally separated
- Double glazing
  thickness 32-40 mm
- Top hinge
- Flush connection
- Circumferentially framed /
  fully or semi-structural
- Max. width per element:
  - 1200 mm (semi-)structural
  - 1700 mm circumferentially
    framed
- EN 12101-2 certified (applies
  solely to fully and semi-
  structural models)

Double glazed top hinge for roof installation

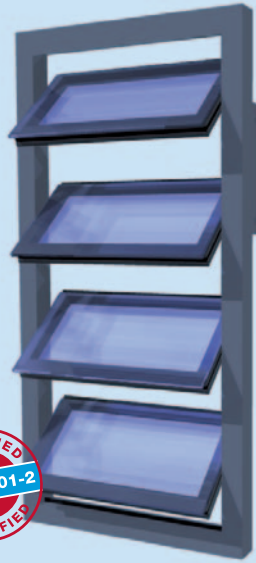### Estra TG Roof

Sustainability:

- Installed in sloping
  roof 5°-75°
- Thermally separated
- Double glazing
  thickness 32-40 mm
- Top hinge
- Flush connection
- Structural
- Max. width per element:
  1400 mm

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Double glazed Center pivoted framed

Estra TG

Sustainability:

- Thermally separated
- Double glazing thickness 24 mm
  Optional thickness 30 mm
- Center pivoted
- Flush connection
- Circumferentially framed
- Also available Iso sandwich
  panel model
- Max. width per element:
  1600 mm (24 mm)
  Optional 1800 mm (30 mm)
- EN 12101-2 certified

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Double glazed Center pivoted (semi-)structural

Estra TG Semi-Structural/TG Structural

Sustainability:

- Thermally separated
- Double glazing in case of semi-
  structural thickness 30 / 40 mm
  Double glazing in case of
  structural thickness dependent
  on thickness of structural
  glazing
- Center pivoted
- Flush connection
- Fully or semi-structural
- Max. width per element:
  1800 mm
- EN 12101-2 certified (applies
  solely to fully structural model)

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Estra product overview

	Estra EG 6 /8 / 10 Overlapping	Estra EG 12 Overlapping	Estra EG 12 Point-Fix Flush	Estra EG 12 Point-Fix Overlapping	Estra EG 10 / 12 Top Flush	Estra EG 10 / 12 Top Overlapping	Estra TG 24 / 30	Estra TG 30 / 40 Semi-Structural	Estra TG Structural	Estra TG 32 / 40 Top Framed	Estra TG 32 / 40 Top Semi-Structural	Estra TG 32 / 40 Top Structural	Estra TG 32 / 40 Roof		
Facade	Single glazing						Double glazing						Roof 5°-75°		
Center pivoted	✓	✓	✓	✓			✓	✓	✓					Center pivoted	Louver attachment
Point-fixed	✓		✓	✓										Point-fixed	
Top hinge					✓	✓				✓	✓	✓	✓	Top hinge	
Circumferentially framed							✓	on the inside	✓					Circumferentially framed	Louver model
Semi-structural	✓	✓	✓	✓	✓	✓		✓			✓			Semi-structural (horizontal structural, supported on the side)	
Structural									✓			✓	✓	Structural	
Overlapping	✓	✓		✓		✓								Overlapping	Louver connection
Flush connection			✓		✓		✓	✓	✓	✓	✓	✓	✓	Flush connection	
Toughened single glass	✓	✓	✓	✓	✓	✓								Toughened single glass	Glass options
Laminated single glass	✓	✓	✓	✓	✓	✓								Laminated single glass	
Double glazing							✓	✓	✓	✓	✓	✓	✓	Double glazing	
Thermally separated							✓	✓	✓	✓	✓	✓	✓	Thermally separated	Further specifications
Iso sandwich panel					✓	✓	✓			✓	✓	✓	✓	Iso sandwich panel	
Glass thickness	6 / 8 / 10	12	12	12	10 / 12	10 / 12	24 / 30	30 / 40	-	32 / 40	32 / 40	32 / 40	32 / 40	Glass thickness	
Louver height (mm)	200-300	200-300	200-300	200-300	250-450	250-450	200-300	200-300	200-300	250-700	250-700	250-700	250-650	Louver height (mm)	
EN 12101-2	✓	✓					✓		✓		✓	✓		EN 12101-2	
Max. width per element	max. 1500 mm (6 / 8 / 10 mm)	max. 1650 mm (12 mm)	max. 1650 mm	max. 1650 mm	max. 1200 mm	max. 1200 mm	max. 1600 mm / 24 mm optional: max. 1800 mm / 30 mm	max. 1800 mm	max. 1800 mm	max. 1700 mm	max. 1200 mm	max. 1200 mm	max. 1400 mm	Max. width per element	

Operating systems

- Manually operated by means of a lever or spindle
- Motor 230V / 24V
- Pneumatic cylinder

Interlinking

Elements can be interlinked using a mullion

For further information, go to our website: www.brakel.com

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