



External weather louvres

WGF**TROX GmbH**

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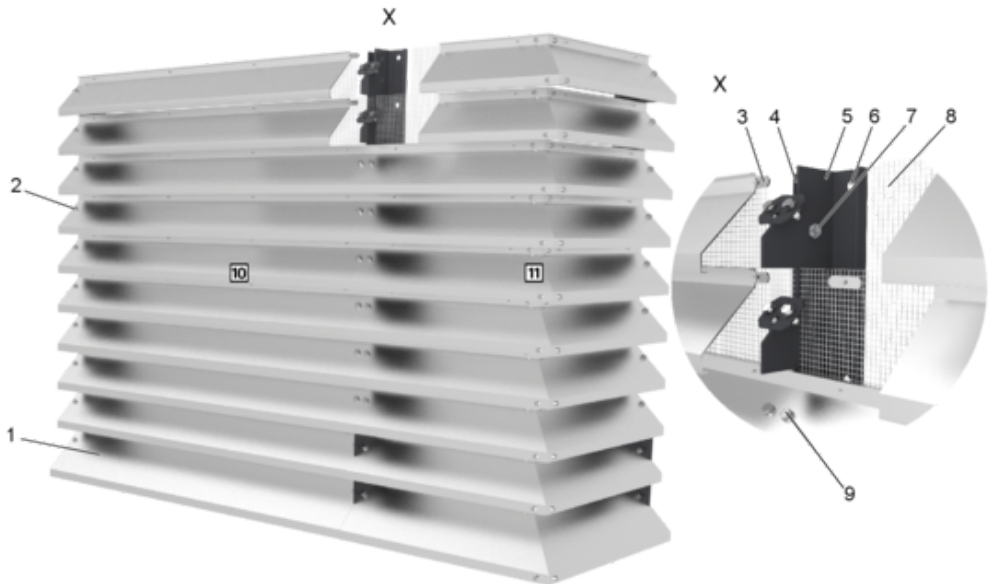
Product overview

Fig. 1: Schematic illustration of WGF

- | | | | |
|---|--------------------------------------|----|----------------------------------------------------------|
| 1 | Bottom blade | 7 | Fixing element to join serrated angle sections |
| 2 | Regular blades | 8 | Crimped wire mesh; additional insect screen as an option |
| 3 | Fixing element for crimped wire mesh | 9 | Fixing element for blades |
| 4 | Serrated angle section, right side | 10 | Middle section WGF-AL-T |
| 5 | Serrated angle section, left side | 11 | Corner section WGF-AL-E |
| 6 | Fixing holes | | |

Safety

Correct use

External weather louvres are installed in or on façades or used to build housings. They protect the ventilation and air conditioning systems and components behind them against direct ingress of precipitation, animals, leaves, etc. In combination with insect screens, they also provide protection against insects. In extreme weather conditions, external weather louvres cannot provide complete protection. Structural measures must be provided to collect and drain off the penetrating precipitation.

Incorrect use



WARNING!

Danger of injury or risk of damage to property due to unauthorised use!

Misuse of the external weather louvres can lead to dangerous situations.

Do not use external weather louvres:

- in systems with aggressive air (to be assessed on a case to case basis)
- in process air systems

Modifying the unit or using replacement parts that have not been approved by TROX is not permitted.

Repair and replacement parts

Only qualified or specialist personnel may repair the products and only original spare parts may be used.

Installation**General installation information****Personnel:**

- HVAC technician
- facade builder

Protective equipment:

- Protective gloves
- Industrial safety helmet
- Safety shoes

Please note:

- Installation should be upright and without torsion.
- Fixing and installation material is not part of the supply package (unless stated otherwise), but has to be provided on site; it has to be suitable for the actual installation situation.

**CAUTION!****Danger of injury from sharp edges, sharp corners and thin sheet metal parts!**

Sharp edges, sharp corners and thin sheet metal parts may cause cuts or grazes.

- Be careful when carrying out any work.
- Wear protective gloves, safety shoes and a hard hat.

Installation types

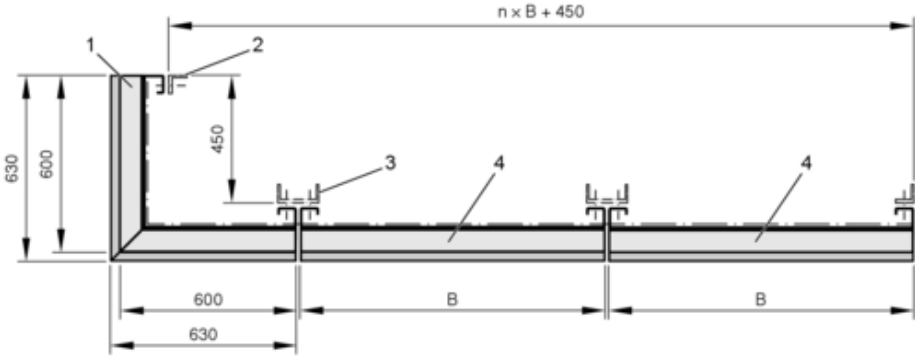


Fig. 2: Façade installation into on-site substructure

- | | | | |
|---|------------------------------------------------------------|---|--------------------------------------------------------------|
| n | Any number of middle sections | 3 | Support structure provided by others, e.g. U-channel section |
| 1 | Corner section (WGF-E) | 4 | Middle section (WGF-T) |
| 2 | ② Support structure provided by others, e.g. angle section | | |

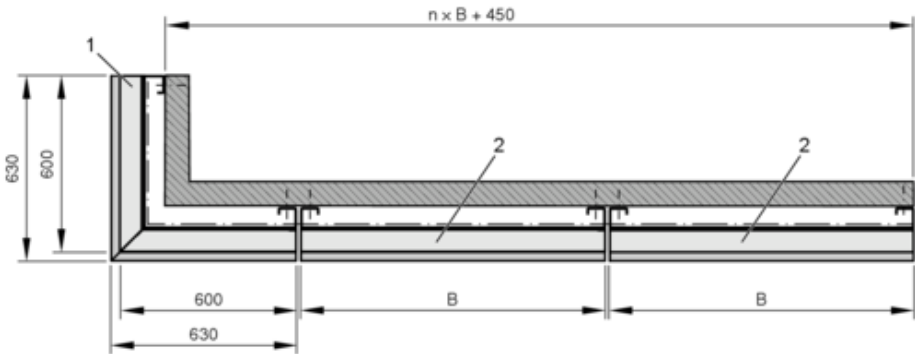


Fig. 3: Wall installation

- | | |
|---|-------------------------------|
| n | Any number of middle sections |
| 1 | Corner section (WGF-E) |
| 2 | Middle section (WGF-T) |

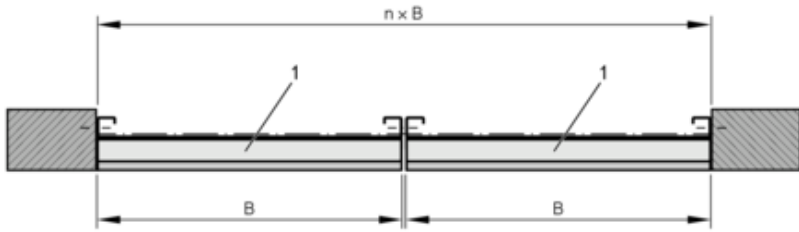


Fig. 4: Wall installation

- n Any number of middle sections
- 1 Middle section (WGF-T)

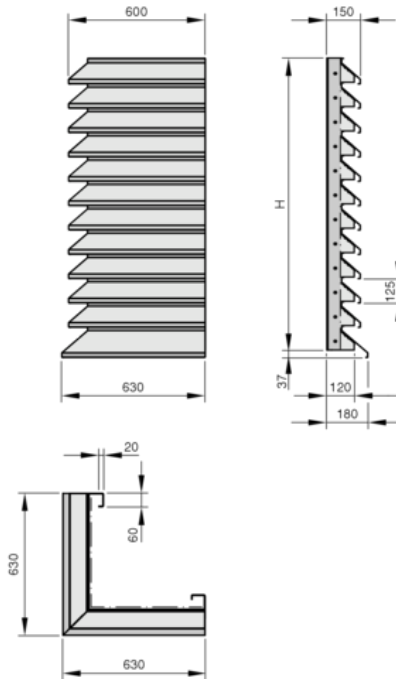


Fig. 5: WGF, corner section

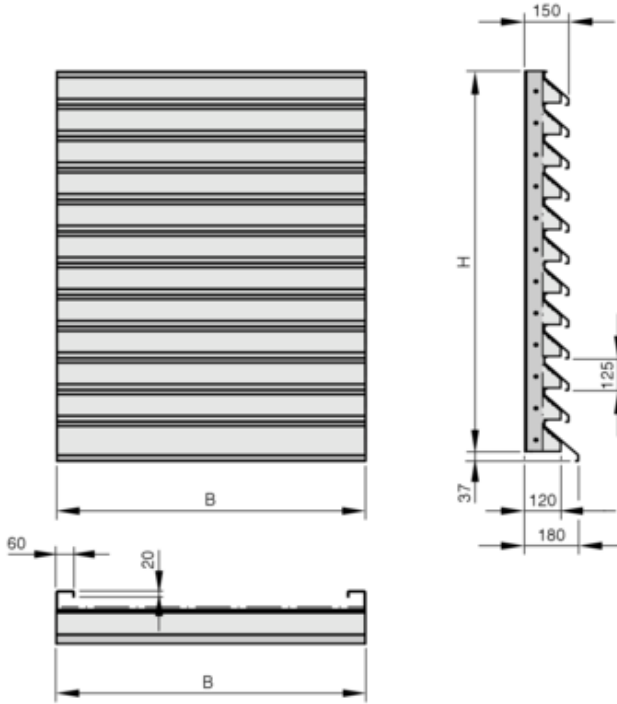


Fig. 6: WGF, middle section

Installation information for external louvres

General installation information

- When designing and constructing ventilation and air conditioning systems, we recommend that you take into account the requirements of VDI6022, in particular:
 - Hygienic, clean installation of all components and their air distribution surfaces
 - Inspection and cleaning options by planning inspection/cleaning openings in the ducting system
 - Avoidance of leaks
- Properly fix the external weather louvre into place.

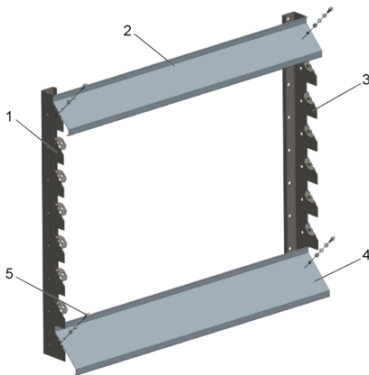


Fig. 7: Mounting upper and lower blade fixing elements

1. Fasten the field blade (2) and the lower bottom blade (4) to the two serrated angle sections (1) and (3) using the fixing elements (5).
2. Align the serrated angle sections (1) and (3) with the two mounted blades vertically on the structure according to the type of installation and fix them into place (fixing elements provided by customer).

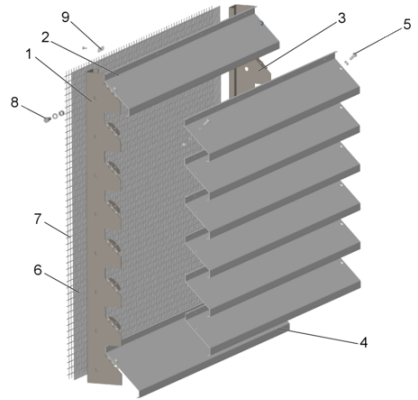


Fig. 8: Mounting field blades and crimped wire mesh

3. Mount the other field blades (2) one after the other on the two serrated angle sections (1) and (3) and fix them into place with the fixing elements (5).
4. Align the crimped wire mesh (7) (optional insect screen (6)) between the crimped wire mesh (7) and blades (2) and (4) with the blades and serrated angle section. Distribute the connecting elements (9) evenly over the surface and fasten to the blades with crimped wire mesh (and optional insect screen).

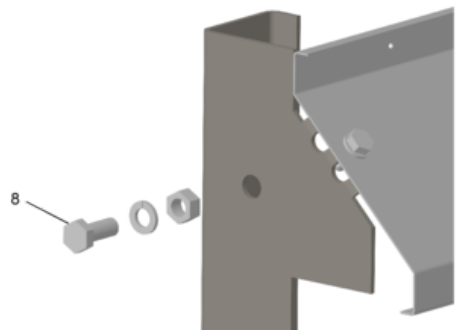


Fig. 9: Installation of segment sections

5. Other segment sections (partial or corner sections) are connected to item 8.

Technical data

General technical data

Item	Value
Blade material	<ul style="list-style-type: none"> ■ Zinc plated steel ■ Aluminium (WGF-AL only)
Serrated angle section material	<ul style="list-style-type: none"> ■ Zinc plated steel
Crimped wire mesh material	<ul style="list-style-type: none"> ■ Zinc plated steel ■ Stainless steel 1.4301 (only WGF-AL)
Insect screen material	<ul style="list-style-type: none"> ■ Zinc plated steel ■ Stainless steel 1.4301 (only WGF-AL)

* No corrosion resistance has been specified for crimped wire mesh and insect screens in accordance with DIN EN ISO 12944-2.

Weight of external weather louvres

WGF-T, weights [kg]

H [mm]	B [mm]									
	200	400	600	800	1000	1200	1400	1600	1800	2000
250	4	5	6	7	8	9	10	11	12	13
375	6	8	9	10	12	13	15	16	18	19
500	8	10	12	14	16	17	19	21	23	25
625	10	12	14	17	19	22	24	26	29	31
750	12	14	17	20	23	26	28	31	34	37
875	13	17	20	23	27	30	33	36	40	43
1000	15	19	23	26	30	34	38	41	45	49
1125	17	21	25	30	34	38	42	47	51	55
1250	19	23	28	33	38	42	47	52	56	61
1375	21	26	31	36	41	46	52	57	62	67
1500	22	28	34	39	45	51	56	62	67	73
1625	24	30	36	42	49	55	61	67	73	79
1750	26	33	39	46	52	59	65	72	78	85
1875	28	35	42	49	56	63	70	77	84	91
2000	30	37	45	52	60	67	75	82	90	97
2125	31	39	47	55	63	71	79	87	95	103
2250	33	42	50	58	67	75	84	92	101	109
2375	35	44	53	62	71	79	88	97	106	115
2500	37	46	55	65	74	84	93	102	112	121

WGF-AL-T, weights [kg]

H [mm]	B [mm]									
	200	400	600	800	1000	1200	1400	1600	1800	2000
250	5	5	6	6	6	7	7	8	8	8
375	6	7	8	9	9	10	11	11	12	13
500	8	9	10	11	12	13	14	15	16	17
625	10	11	12	13	15	16	17	19	20	21
750	11	13	14	16	18	19	21	22	24	26
875	13	15	16	18	20	22	24	26	28	30
1000	14	16	19	21	23	25	27	30	32	34
1125	16	18	21	23	26	28	31	33	36	38
1250	17	20	23	26	29	31	34	37	40	43
1375	19	22	25	28	31	34	38	41	44	47
1500	20	24	27	31	34	37	41	44	48	51
1625	22	26	29	33	37	41	44	48	52	55
1750	23	28	32	36	40	44	48	52	56	60
1875	25	29	34	38	42	47	51	55	60	64

H [mm]	B [mm]									
	200	400	600	800	1000	1200	1400	1600	1800	2000
2000	27	31	36	40	45	50	54	59	64	68
2125	28	33	38	43	48	53	58	63	68	72
2250	30	35	40	45	51	56	61	66	71	77
2375	31	37	42	48	53	59	64	70	75	81
2500	33	39	44	50	56	62	68	74	79	85

WGF-E, weights [kg]

H [mm]	WGF-E	WGF-AL-E
250	9	7
375	13	10
500	17	13
625	21	16
750	25	19
875	30	22
1000	34	25
1125	38	28
1250	42	31
1375	46	34
1500	50	37
1625	55	40
1750	59	43
1875	63	46
2000	67	49
2125	71	52
2250	75	55
2375	79	58
2500	84	61

Commissioning

Commissioning and operation

Personnel:

- Specialized personnel
 - ▶ Before you start commissioning:
 - Check that the external weather louvres are properly installed in or on the façade.
 - All external weather louvres are clean and free of residues and foreign bodies.

Commissioning



Code of good practice for commissioning

Commissioning is governed by the standard "DIN EN 12599 Testing and measuring procedures for the transfer of installed ventilation and air conditioning systems", and, if applicable, contractually agreed services between HVAC contractors, system owners and installation engineers. The standard describes the essential commissioning steps of the completeness check, function test, function measurement, as well as report generation and handover.

Operation

Once commissioning has been completed, the external weather louvre will operate independently and require no intervention from the system owner.

Depending on the area of application of the external weather louvre, test specifications and intervals may need to be observed.

Maintenance

System owner's responsibility



WARNING!

Only authorised specialist personnel are allowed to perform the described maintenance measures.

The system owner is responsible for maintenance. The system owner is responsible for creating a maintenance plan, for defining the maintenance goals, and for the functional reliability of the equipment.

The legal regulations must be observed during maintenance, e.g. the system owner is responsible for hygienic operation in accordance with VDI 6022.

Maintenance

External weather louvres are low-maintenance in terms of wear, but the external weather louvre must be included in the regular cleaning of the ventilation system. Regular maintenance ensures the service life of the external weather louvre.

Inspection measures

1. ▶ Remove function-impairing dirt from the external weather louvre. The cleaning intervals given in the VDI 6022 standard apply. Clean surfaces with a damp cloth. Use only common household cleaners, do not use any aggressive cleaning agents. Do not use cleaning agents that contain chlorine. Do not use equipment for removing stubborn contamination, e.g., scrubbing sponges or scouring cream, as it may damage the surfaces.
2. ▶ Check all screws for firm seating and retighten them, if necessary.

Repair

Repair work is only allowed to be carried out by specialist personnel or by the manufacturer. Only genuine replacement parts must be used.

Disposal**ENVIRONMENT!****Risk of harm to the environment due to incorrect disposal!**

Incorrect disposal can harm the environment.

- Be sure to comply with the relevant national guidelines and regulations.
- In case of doubt, contact your local authorities or a specialist disposal company.

Note: The external weather louvre must be dismantled for disposal.

If no disposal agreement with TROX GmbH is in place, we recommend disposing of the various materials in the following.

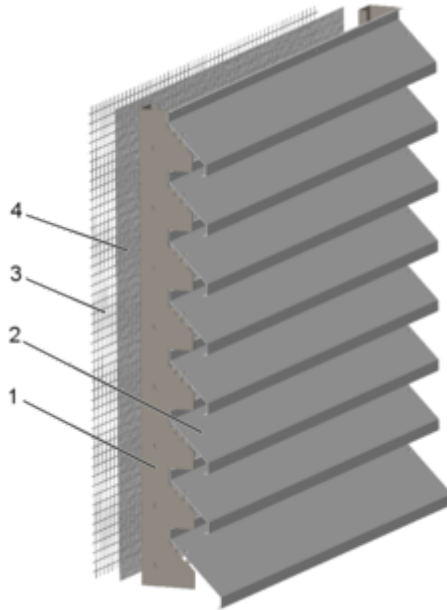


Fig. 10: Schematic diagram of external weather louvre

Position	Component	Material/waste disposal code	Type of disposal
1	Serrated angle sections	galvanised sheet steel EWC 17 04 05	According to EWC
2	Blades	galvanised sheet steel EWC 17 04 05 Aluminium EWC 17 04 02	
3	Crimped wire mesh	Zinc plated steel EWC 17 04 04 Stainless steel wire EWC 17 04 05	
4	Insect screen	Zinc plated steel EWC 17 04 04 Stainless steel wire EWC 17 04 05	

EWC European Waste Catalogue