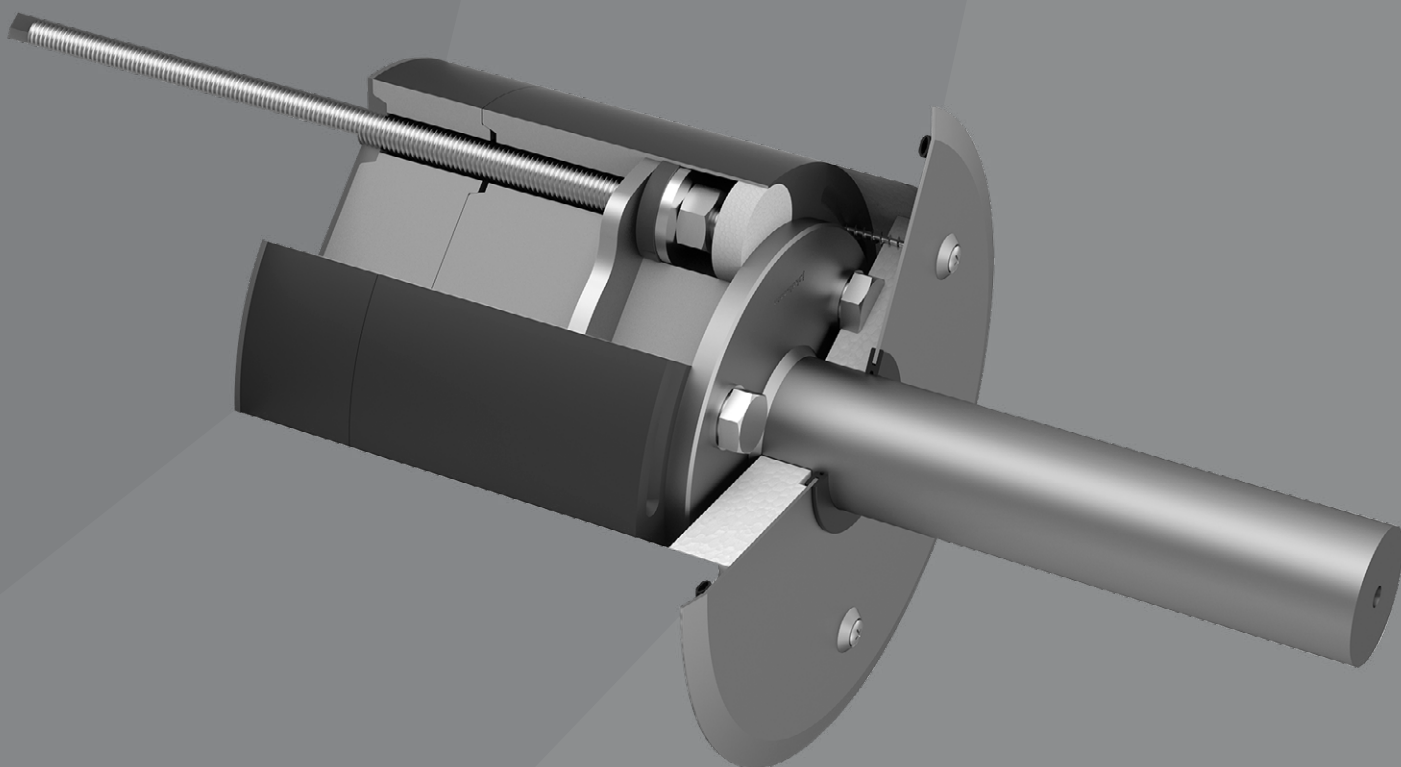


Technical information

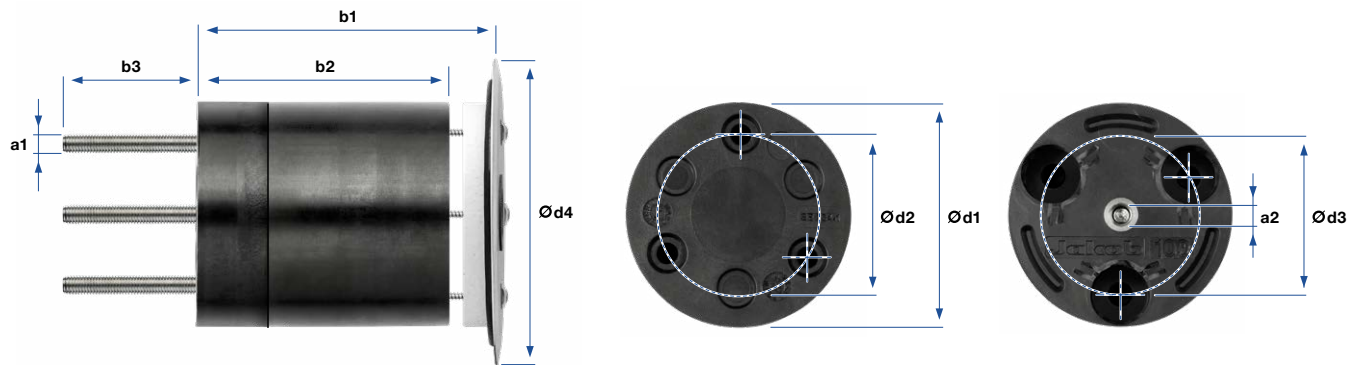
GreenBlock

Thermally separated high-load bracket for facade greening solutions on insulated facades



GreenBlock 125 Set – Assembly group

No.	a1	Thread		b1	b2	b3	Ød1	Ød2	Ød3	Dimension		Weight
		a2								mm	mm	
30805-0125-120-1	M10	M12		120	100	70	125	90	90	170	1,5700	
30805-0125-140-2	M10	M12		140	120	74	125	90	90	170	1,7500	
30805-0125-160-3	M10	M12		160	140	74	125	90	90	170	1,9200	
30805-0125-180-4	M10	M12		180	160	79	125	90	90	170	2,1000	
30805-0125-200-5	M10	M12		200	180	84	125	90	90	170	2,2800	
30805-0125-220-6	M10	M12		220	200	94	125	90	90	170	2,4800	
30805-0125-240-7	M10	M12		240	220	99	125	90	90	170	2,6500	
30805-0125-260-8	M10	M12		260	240	104	125	90	90	170	2,8300	



The set consists of:

- Base body with extension
- Fastening and joining materials
- Covering and sealing material

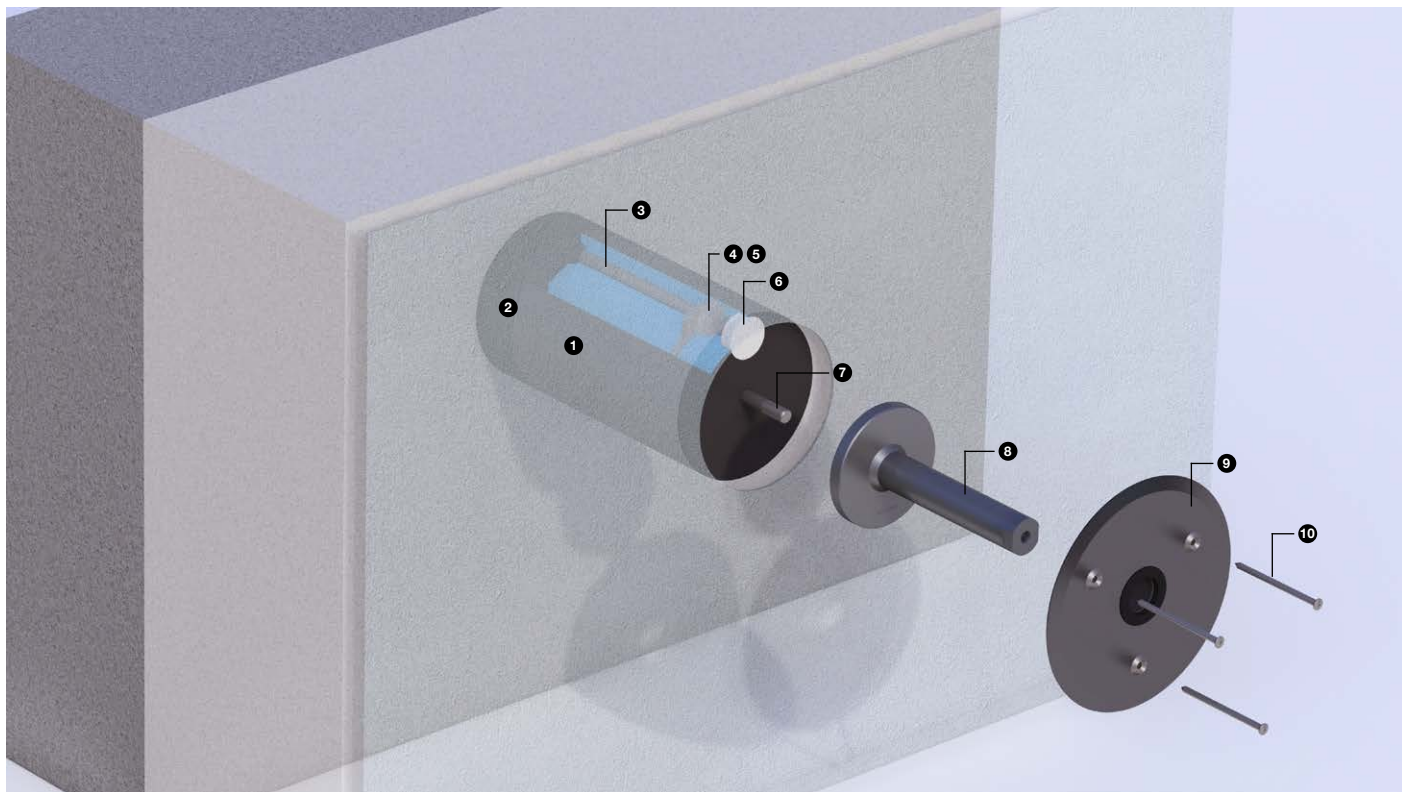
Not included are:

- Composite mortar
- Spacer
- Headless screw or threaded adapter for spacers

Suitable for GreenTrellis spacers:

- No. 30897-0100-10 (100 mm)
- No. 30897-0150-10 (150 mm)
- No. 30897-0200-10 (200 mm)

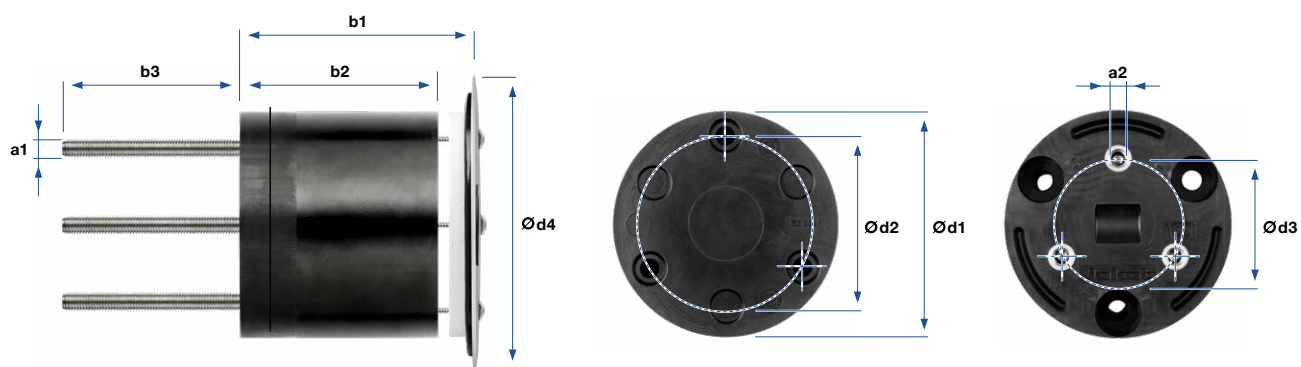
GreenBlock 125 Set – Components



Pos.	Component	Dimension	Item-No.
1	GreenBlock base body	Ø 125 x 100 mm	30805-0125-100
		Ø 125 x 180 mm	30805-0125-180
2	GreenBlock extension	Ø 125 x 20 mm	30805-0125-020
		Ø 125 x 40 mm	30805-0125-040
		Ø 125 x 60 mm	30805-0125-060
3	Headless screw	M10	30882-1000-XXX
4	Washer	M10	30896-1200-30
5	Lock nut	M10	30892-1000-02
6	EPS roundels small	Ø 34 mm	30805-0125-005
7	Headless screw oder threaded adapter <small>Articles are not included in the group number.</small>	M10/M12	30805-0125-006
		M12	30882-1200-040
8	Spacer GreenTrellis <small>Articles are not included in the group number.</small>	100 mm M10	30897-0100-10
		150 mm M10	30897-0150-10
		200 mm M12	30897-0200-10
9	Cover plate with gasket	Ø 170 mm	30805-0125-007
10	Countersunk facade screw with sealing washer	Ø 4,5 x 80 mm	30841-0450-080-01

GreenBlock 160 Set – Assembly group

No.	Thread		b1	b2	b3	Ød1	Ød2	Ød3	Dimension		Weight
	a1	a2							mm	mm	
30805-0160-120-1	M12	M12	120	100	112	160	125	92	210	2,7500	
30805-0160-140-2	M12	M12	140	120	117	160	125	92	210	3,0600	
30805-0160-160-3	M12	M12	160	140	127	160	125	92	210	3,3400	
30805-0160-180-4	M12	M12	180	160	132	160	125	92	210	3,6200	
30805-0160-200-5	M12	M12	200	180	137	160	125	92	210	3,9200	
30805-0160-220-6	M12	M12	220	200	147	160	125	92	210	4,2200	
30805-0160-240-7	M12	M12	240	220	152	160	125	92	210	4,5100	
30805-0160-260-8	M12	M12	260	240	157	160	125	92	210	4,8000	



The set consists of:

- base body with extension
- Fastening and joining materials
- Covering and sealing material

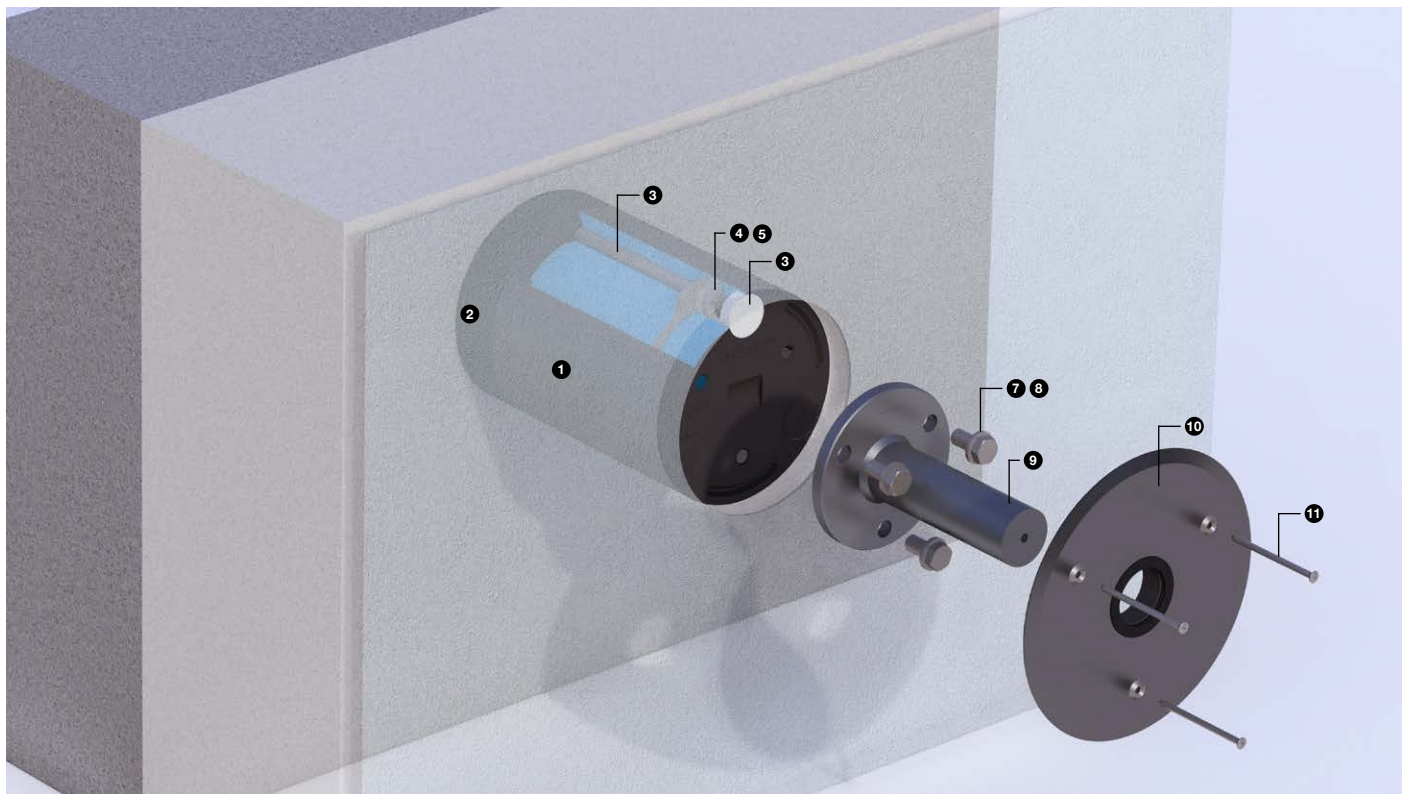
Not included are:

- Composite mortar
- Spacer

Suitable for the GreenWebnet spacers:

- No. 30897-0100-00 (100 mm)
- No. 30897-0150-00 (150 mm)
- No. 30897-0200-00 (200 mm)

GreenBlock 160 Set – Components



Pos.	Component	Dimension	Item-No.
1	GreenBlock base body	Ø 160 x 100 mm	30805-0160-100
		Ø 160 x 180 mm	30805-0160-180
2	GreenBlock extension	Ø 160 x 20 mm	30805-0160-020
		Ø 160 x 40 mm	30805-0160-040
		Ø 160 x 60 mm	30805-0160-060
3	Headless screw	M12	30882-1200-XXX
4	Washer	M12	30896-1200-30
5	Lock nut	M12	30892-1200-02
6	EPS roundels small	Ø 34 mm	30805-0125-005
7	Hexagon head screw	M12	30843-1200-025
8	Washer	M12	30896-1200
9	Spacer GreenWebnet Articles are not included in the group number.	100 mm	30897-0100-00
		150 mm	30897-0150-00
		200 mm	30897-0200-00
10	Cover plate with gasket	Ø 210 mm	30805-0160-007
11	Countersunk facade screw with sealing washer	Ø 4,5 x 80 mm	30841-0450-080-01

Thermally-insulated composite facade (compact facade) Subsequent installation

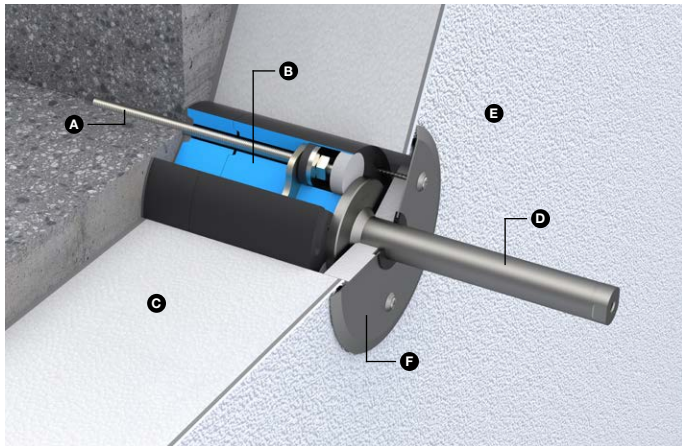
Facade structure

Supporting structure: Concrete (quality C25/30 or higher)
Insulation: EPS or rock- / glass-wool
Cladding: Exterior plaster

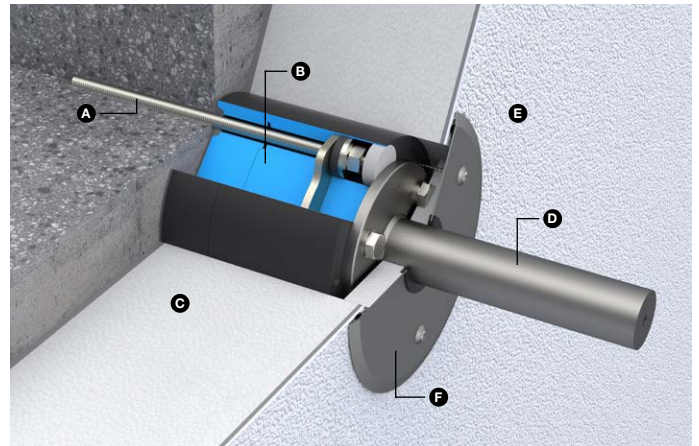
Time of installation

After completion of the facade

GreenBlock 125 with spacer GreenTrellis



GreenBlock 160 with spacer GreenWebnet



Installation scenario

- A** Anchoring in concrete with headless screws A4-70 and composite mortar
- B** GreenBlock (suitable combination of base body and extension, depending on insulation thickness)
- C** External insulation with insulation thicknesses 120–260 mm
- D** Spacer type GreenTrellis/GreenWebnet
- E** Exterior plaster
- F** Cover plate with integrated seal

Notes

Installation according to the GreenBlock assembly instructions. See PDF at jakob.com > Downloads > Assembly instructions > [Assembly instruction GreenBlock 125](#) / [Assembly instruction GreenBlock 160](#)

For insulation thicknesses of less than 120 mm and more than 260 mm, we offer solutions by reworking standard components and by producing custom-made products. Please get in touch with us.

Composite thermal insulation facade (compact facade)

Prior installation in two steps

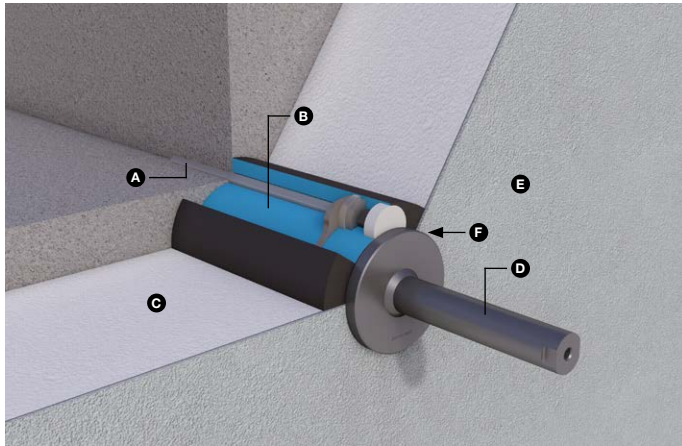
Facade structure

Supporting structure: Concrete (quality C25/30 or higher)
Insulation: EPS or rock- / glass-wool
Exterior finish: Exterior plaster

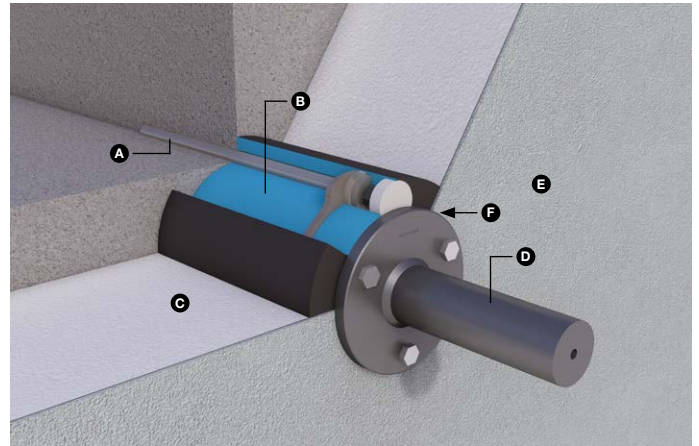
Time of installation

Step 1: Installation of the GreenBlocks in the shell / before installing the external insulation
Step 2: Installation of the spacer after completion of the façade

GreenBlock 125 with spacer GreenTrellis



GreenBlock 160 with spacer GreenWebnet



Installation scenario

- Ⓐ Anchoring in concrete with headless screws A4-70 and composite mortar
- Ⓑ GreenBlock (suitable combination of base body and extension, depending on insulation thickness)
- Ⓒ External insulation with thicknesses of 100–240 mm
- Ⓓ Spacer for GreenTrellis/GreenWebnet (installation on exterior plaster)
- Ⓔ Exterior plaster on site as a seal
- Ⓕ Neoprene sealing washer (with sliding washer for spacer type GreenTrellis)

Notes

Installation according to the GreenBlock assembly instructions. See PDF at jakob.com > Downloads > Assembly instructions > [Assembly instruction GreenBlock 125](#) / [Assembly instruction GreenBlock 160](#)

For insulation thicknesses of less than 100 mm, we offer solutions by reworking standard components and with custom-made products. Please get in touch with us.

Sealing between the external plaster and the spacer must be carried out and ensured by the user.

The internal threads in the GreenBlock must remain detectable and clean after plastering. Screws must therefore be inserted temporarily before plastering. If grub screws are used that will not be replaced later, they must be protected from dirt.

Ventilated façade with flat cladding

Subsequent installation

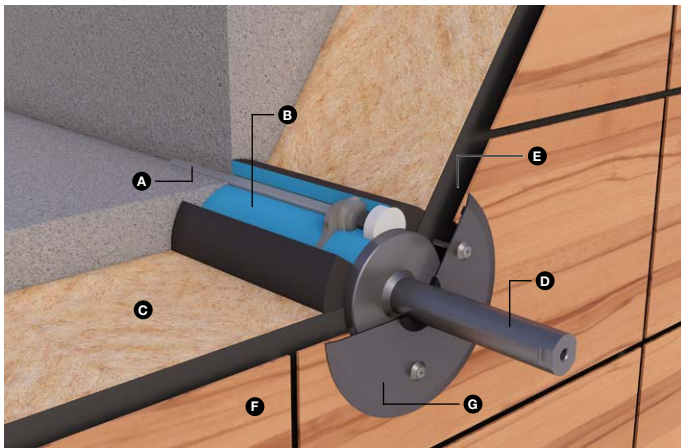
Facade structure

Supporting structure:	Concrete (quality C25/30 or higher)
Insulation:	EPS or rock- / glass-wool
Facade membrane:	Sealing layer to protect the insulation and supporting structure
Ventilation space:	Layer for moisture transfer
Exterior finish:	Facade cladding, sealing layer against driving rain

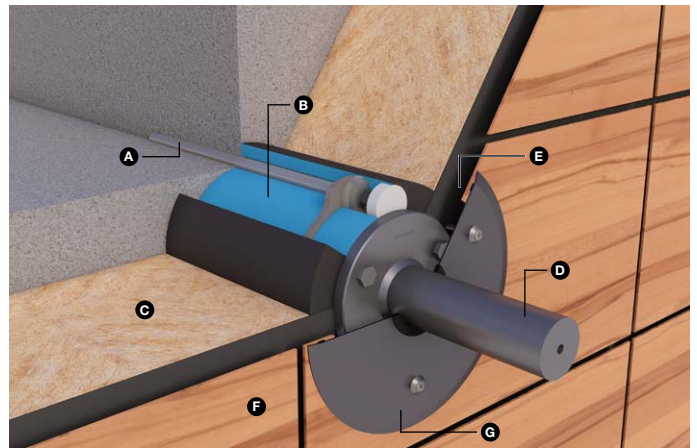
Time of installation

After completion of the facade

GreenBlock 125 with spacer GreenTrellis



GreenBlock 160 with spacer GreenWebnet



Installation scenario

- A** Anchoring in concrete with headless screws A4-70 and composite mortar
- B** GreenBlock (suitable combination of base body and extension, depending on insulation thickness)
- C** External insulation with thicknesses of 100–240 mm
- D** Spacer type GreenTrellis / GreenWebnet
- E** Facade membrane and ventilated cavity
- F** Cladding (wood panels, sheet-metal panels, or synthetic-resin panels)
- G** Cover plate with seal

Notes

For subsequent installation, the cladding must be cut out on site using a suitable tool. The GreenBlock assembly tool is not suitable for this.

A flat surface is required for sealing with the cover sheet to ensure a driving-rain-tight connection between it and the facade.

For insulation thicknesses under 100 mm and over 240 mm, we offer solutions through reworking standard components and by producing custom-made products. Please get in touch with us.

Ventilated facade with uneven cladding

Prior installation

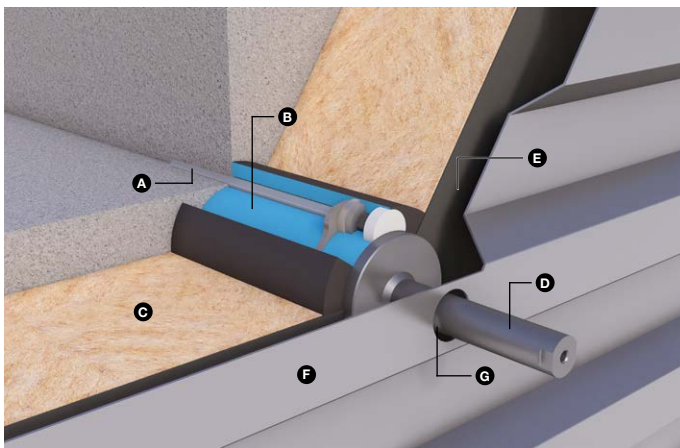
Facade structure

Supporting structure:	Concrete (quality C25/30 or higher)
Insulation:	EPS or rock- / glass-wool
Facade membrane:	Sealing layer to protect the insulation and supporting structure
Ventilation space:	Layer for moisture transfer
Exterior finish:	Facade cladding, sealing layer against driving rain

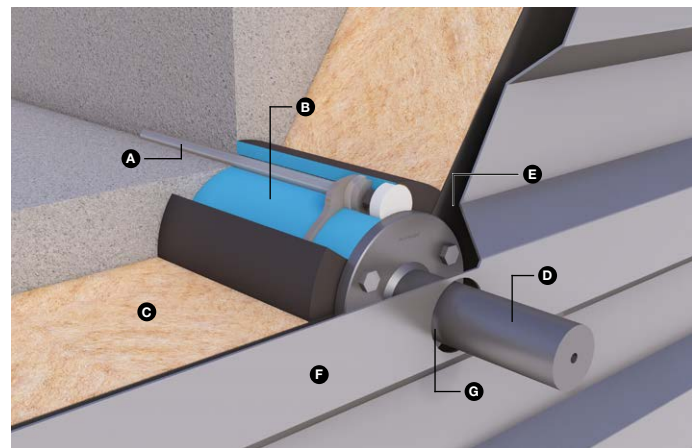
Time of installation

Before or immediately after installing the external insulation

GreenBlock 125 with spacer GreenTrellis



GreenBlock 160 with spacer GreenWebnet



Installation scenario

- A** Anchoring in concrete with headless screws A4-70 and composite mortar
- B** GreenBlock (suitable combination of base body and extension, depending on insulation thickness)
- C** External insulation with thicknesses of 100–240 mm
- D** Spacer type Typ GreenTrellis / GreenWebnet
- E** Facade membrane and ventilated cavity
- F** Cladding (wood panels, sheet-metal panels, or synthetic-resin panels)
- G** On-site sealing

Notes

The opening in the garmen must be created and sealed by the user.

For insulation thicknesses under 100 mm and over 240 mm, we offer solutions through reworking standard components and by producing custom-made products. Please get in touch with us.

Ventilated facade with thick-walled cladding

Subsequent installation

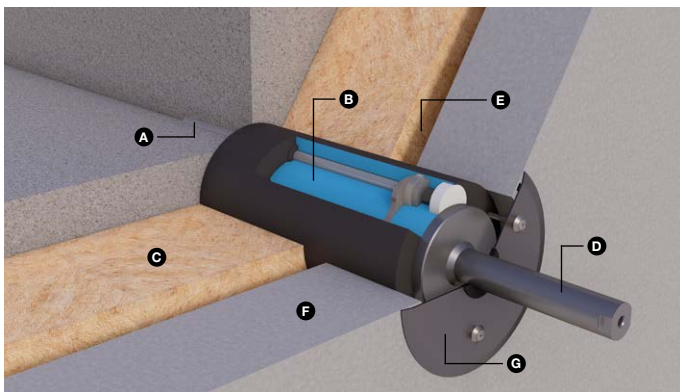
Facade structure

Supporting structure:	Concrete (quality C25/30 or higher)
Insulation:	EPS or rock- / glass-wool
Facade membrane:	Sealing layer to protect the insulation and supporting structure
Ventilation space:	Layer for moisture transfer
Exterior finish:	Facade cladding, sealing layer against driving rain

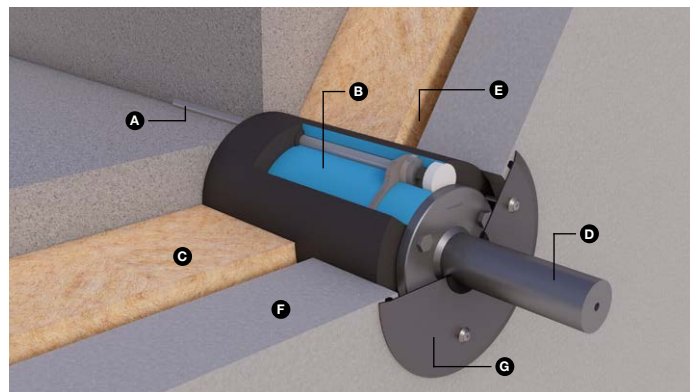
Time of installation

After completion of the facade

GreenBlock 125 with spacer GreenTrellis



GreenBlock 160 with spacer GreenWebnet



Installation scenario

- A** Anchoring in concrete with headless screws A4-70 and composite mortar
- B** GreenBlock (suitable combination of base body and extension, depending on insulation thickness)
- C** External insulation with thicknesses of 100–200 mm
- D** Spacer type GreenTrellis/GreenWebnet
- E** Facade membrane and ventilated cavity
- F** Cladding with > 40 mm wall thickness (curtain-type brick, concrete or sandstone elements)
- G** Cover plate with seal

Notes

For subsequent installation, the cladding must be cut out on site using a suitable tool (e.g., on-site core drilling). The GreenBlock assembly tool is not suitable for this.

To facilitate installation, the GreenBlock must be guided up to the cladding level to ensure it is installed correctly.

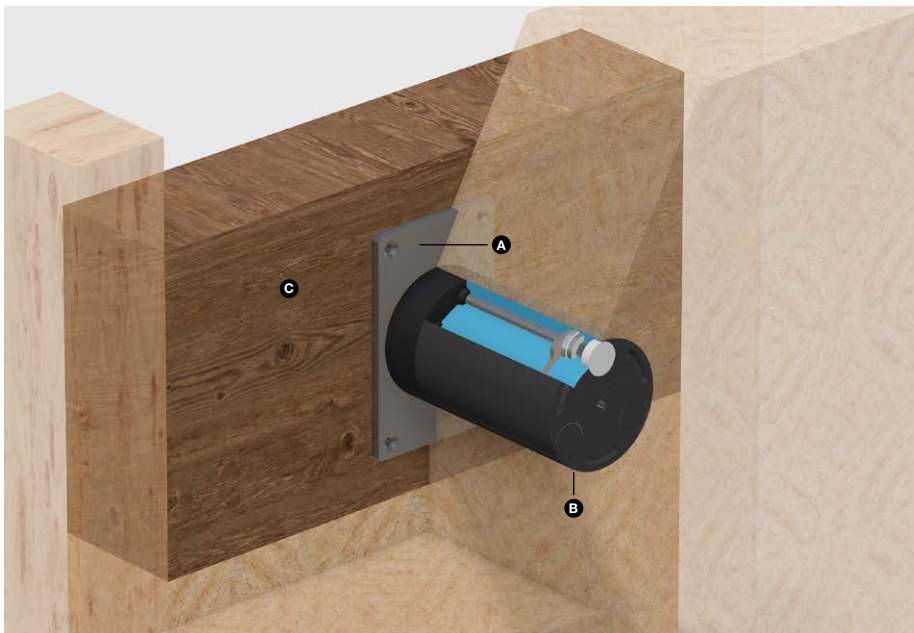
A flat surface is required for sealing with the cover flashing to ensure a driving rain-resistant connection between it and the facade.

For insulation thicknesses of less than 100 mm and more than 200 mm, we offer solutions by reworking standard components and with custom-made products. Please get in touch with us.

Special application with nonstandard anchoring in the timber structure

The GreenBlock can be anchored to timber structures with on-site reinforcement measures. The installation must take place before the external insulation is applied. Due to the project-specific circumstances and requirements, the technical details must be individually checked and worked out by the responsible planners.

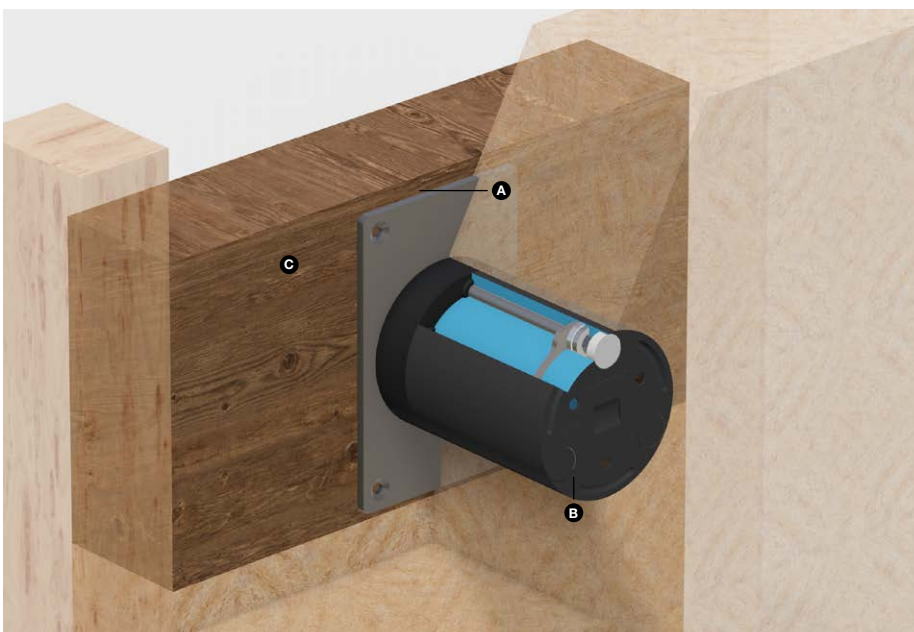
Example installation scenario GreenBlock 125



Installation scenario

- A Steel base plate for load distribution (supplied as a special component)
- B GreenBlock
- C Excavation (on site)

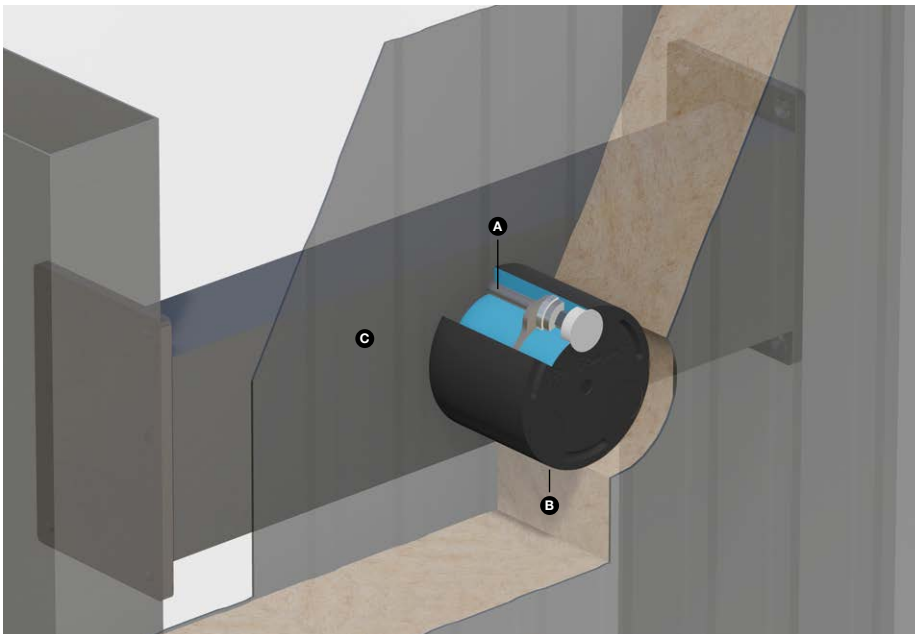
Example installation scenario GreenBlock 160



Special application with nonstandard anchorage in steel structure

The GreenBlock can be anchored to steel structures with on-site reinforcement measures. Due to the project-specific circumstances and requirements, the technical details must be individually checked and worked out by the responsible planners.

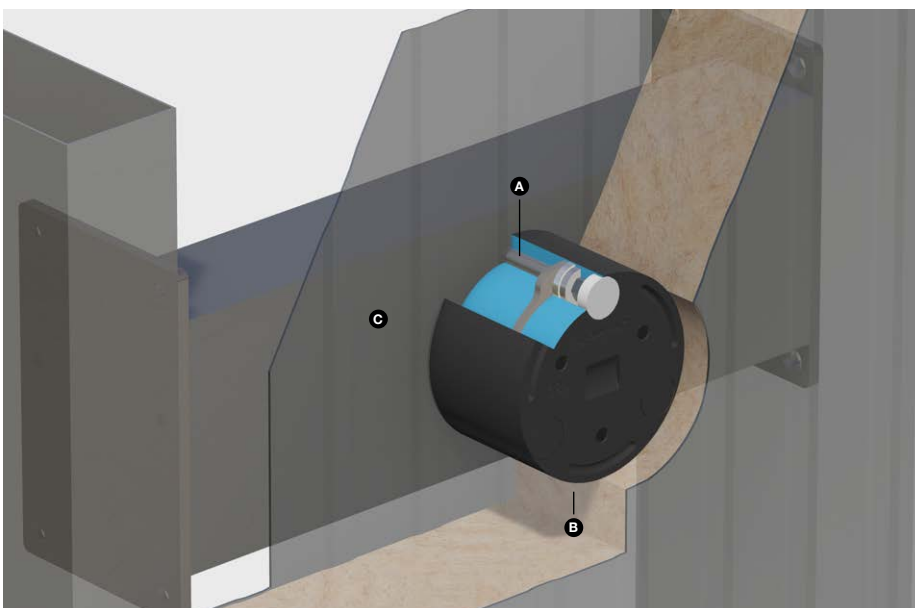
Example installation scenario GreenBlock 125



Installation scenario

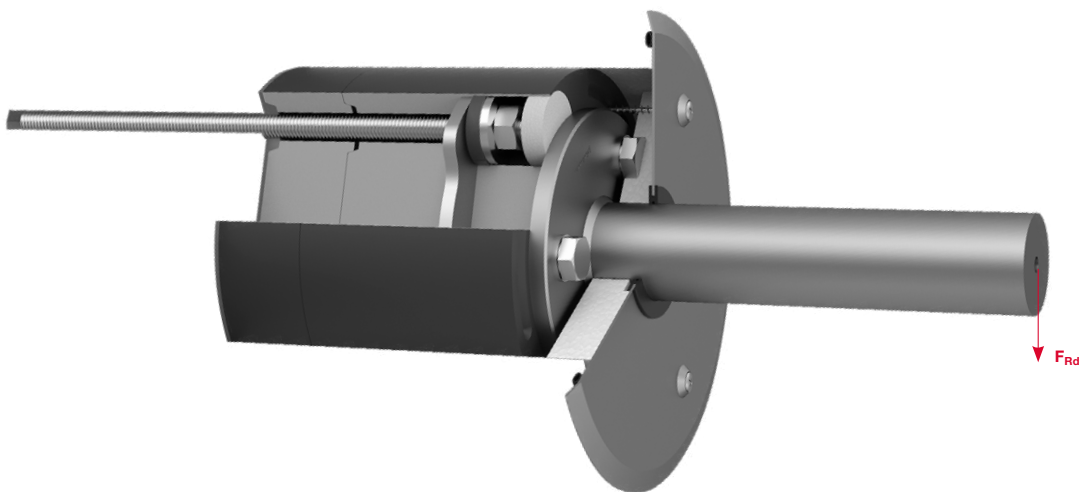
- Ⓐ Headless screws guided throughout and locked from the inside with a nut
- Ⓑ GreenBlock
- Ⓒ Steel girder on site (hollow profile with through-holes)

Example installation scenario GreenBlock 160



Design loads

			mm	mm	mm	mm	mm	mm	mm	mm
Insulation Thickness – Subsequent Installation			120	140	160	180	200	220	240	260
Insulation thickness – Previous installation			100	120	140	160	180	200	220	240
	High-load console	Suitable spacer	kN	kN	kN	kN	kN	kN	kN	kN
Limit force [F_{Rd}]	GreenBlock 125	30897-0100-10	7.19	7.19	7.19	7.19	7.19	7.19	7.19	7.19
	GreenBlock 125	30897-0150-10	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
	GreenBlock 125	30897-0200-10	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
	GreenBlock 160	30897-0100-00	14.76	14.76	14.76	14.76	14.76	14.76	14.76	14.76
	GreenBlock 160	30897-0150-00	10.59	10.59	10.59	10.59	10.59	10.59	10.59	10.59
	GreenBlock 160	30897-0200-00	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25
Serviceability limit force [F_{Rd,GZG}]	GreenBlock 125	30897-0100-10	7.19	7.19	7.19	7.19	6.96	6.21	5.45	4.70
	GreenBlock 125	30897-0150-10	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.18
	GreenBlock 125	30897-0200-10	4.12	4.12	4.12	4.12	4.12	4.12	4.06	3.66
	GreenBlock 160	30897-0100-00	14.76	14.76	14.76	12.32	11.38	10.44	9.49	8.55
	GreenBlock 160	30897-0150-00	10.59	10.59	10.59	10.29	9.82	9.34	8.36	7.38
	GreenBlock 160	30897-0200-00	8.25	8.25	8.25	8.25	8.25	8.25	7.24	6.21

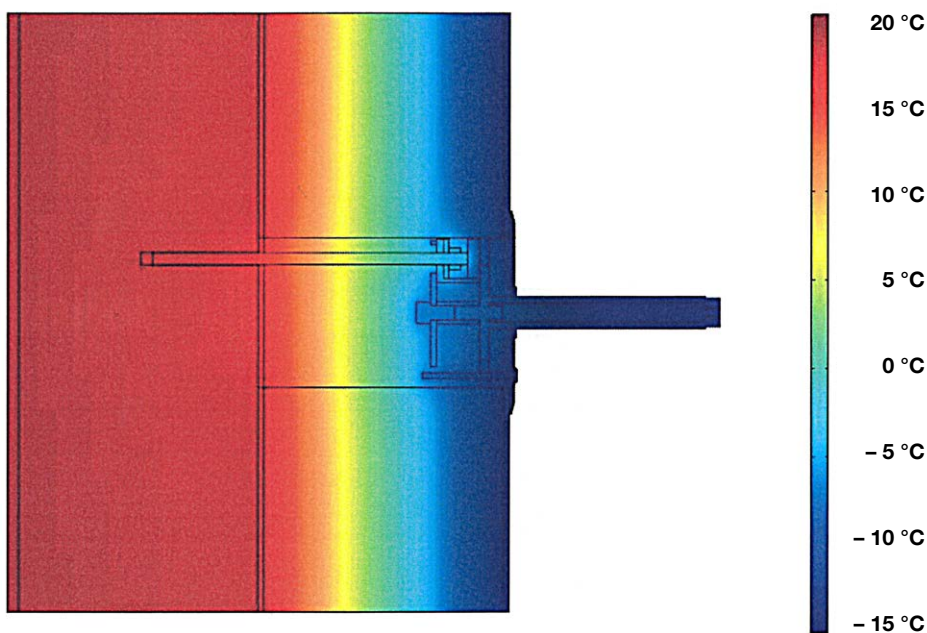


Please note:

- To determine the limit force, the 5 % fractile value is taken into account with a material safety factor of 1.3.
- The serviceability values correspond to the load at a deformation of 3 mm at the outer edge of the facade.
- The resistance values of the 150-mm-long spacers were interpolated.
- Both verifications of load-bearing capacity [F_{Rd}] and serviceability [F_{Rd,GZG}] must be provided

Building physical properties

		mm	mm	mm
Insulation thickness		120	200	260
	Mounting element	W/K	W/K	W/K
Point heat transfer coefficient [W/m ² K]	GreenBlock 125	0.0271	0.0188	0.0158
	GreenBlock 160	0.0384	0.0270	0.0222



Surface: Temperature (°C)

Please note:

- Check seals every 3 years.
- The main material of the GreenBlock corresponds to fire protection class E in accordance with EN 13501-1 (normal flammability).
- Installation must be carried out by trained personnel.
- Available insulation thicknesses: 120–260 mm for subsequent installation, 100–240 mm for prior installation.
- A suitable installation tool is available from Jakob Rope Systems for professional installation.
- The planning and installation of GreenBlock require a certain level of expertise. Please note the additional information in the installation manual and contact us for further support.

Disclaimer

This publication has been prepared with all due care and to the best of our knowledge. The publishers and the author are not liable for any damages that may arise from the use and application of this publication.

GreenBlock installation instructions

[jakob.com](#) > Downloads > Montageanleitungen

[Assembly instructions GreenBlock 125 \(PDF\)](#) | [Assembly instruction GreenBlock 160 \(PDF\)](#)

[jakob.com](#) > Downloads > Videos

[Assembly instruction GreenBlock 160 \(video\)](#)

