

■ Assembly options

Determining dimensions sealing frame

Ventilation flap 39

Overview and selection

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Thermal insulation

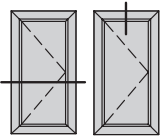
U_{eq} values 42



Additional documents

- No. 002002 Planning aluminum windows FRAME⁺ 75

Further general information on the subject of U_f values can be found in the chapter **Thermal insulation**

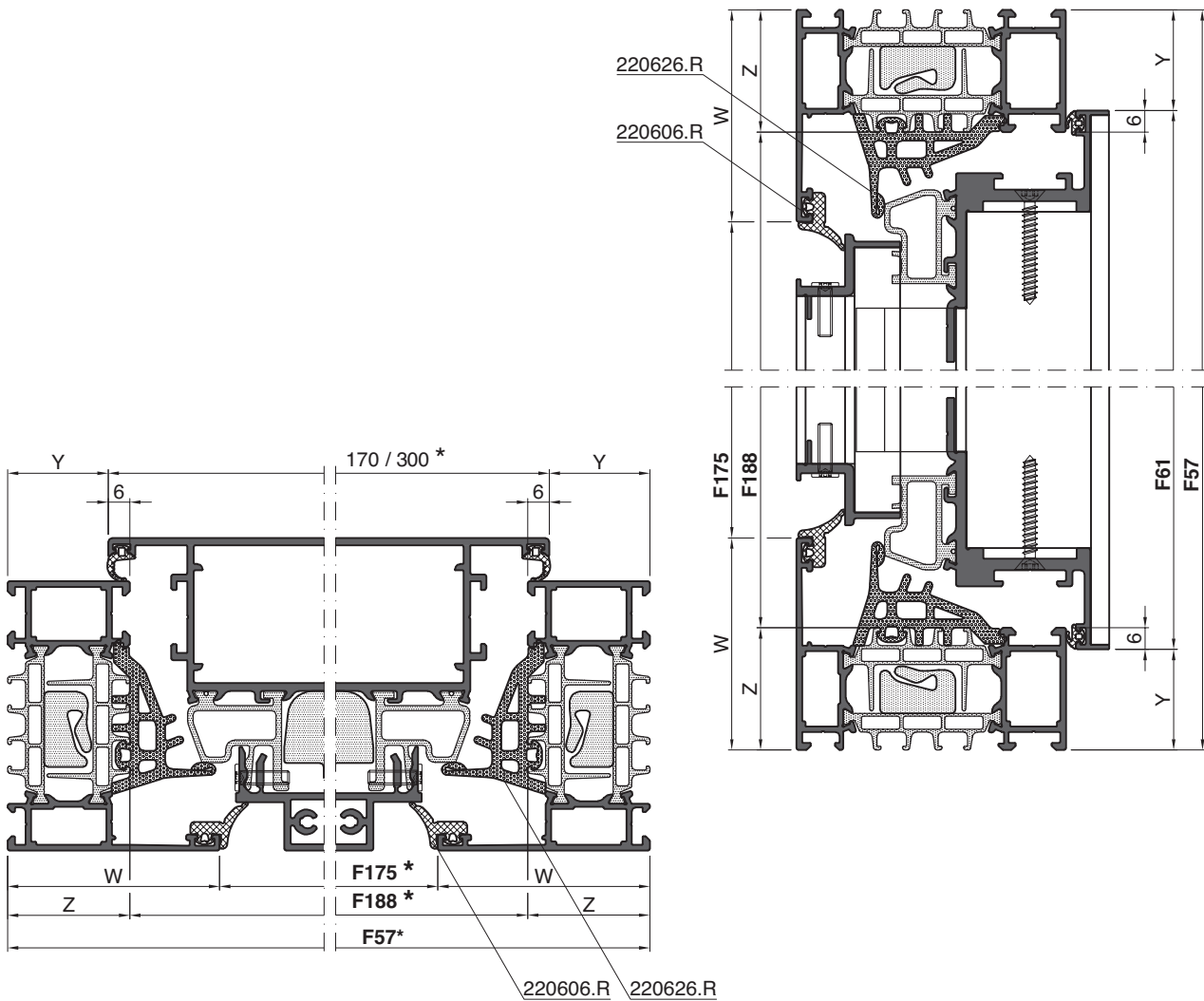


Determining dimensions for sealing frame
Ventilation flap
 LF 170/300

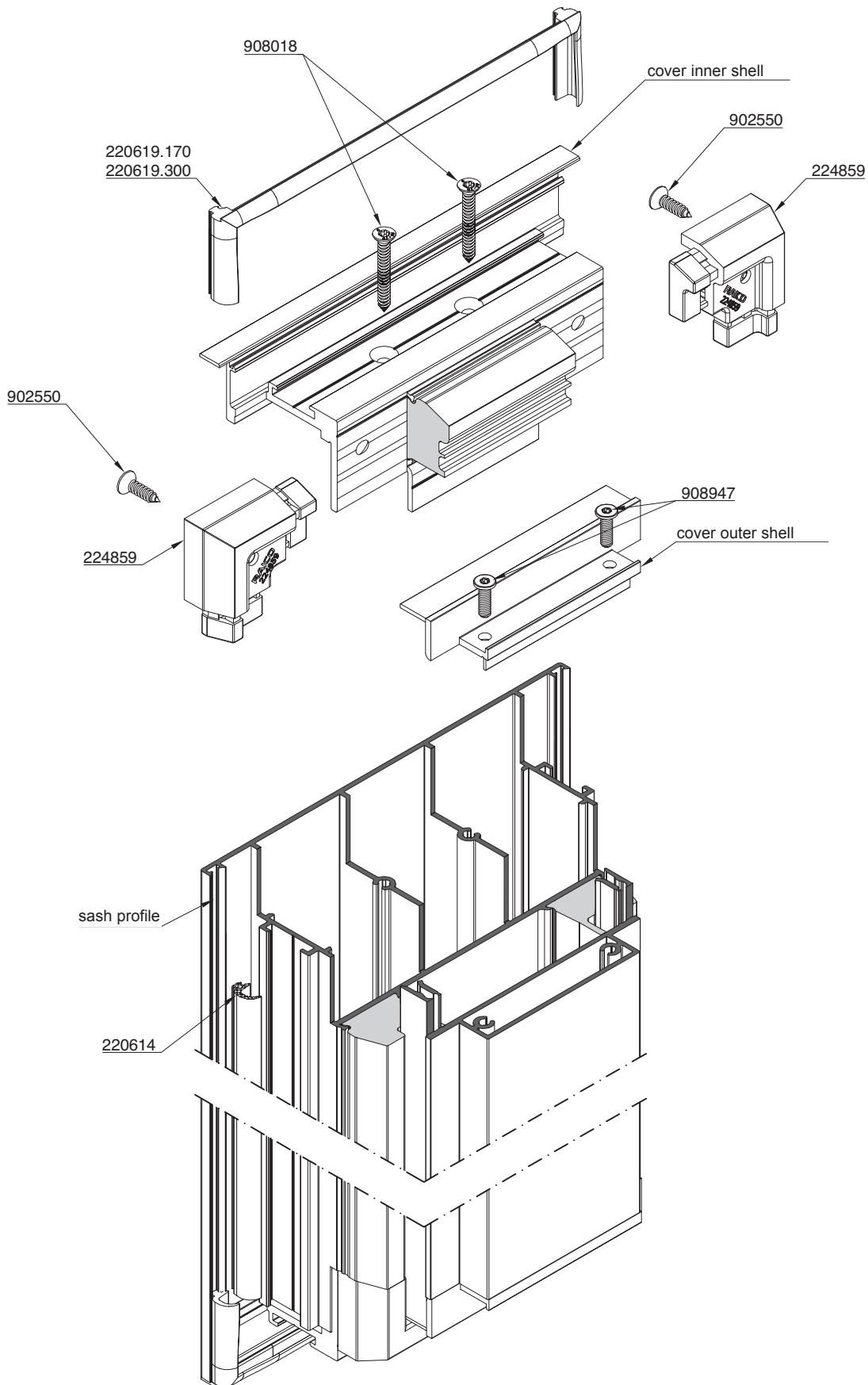
■ **Technical information**

- The sealing frame is supplied in oversize dimensions
- * For sash width < 200 mm, the frame must be 1 mm larger

- **F57** = EFD +/-0.5 (external frame dimension)
- **F61** = FAM +0/-1 (sash outer dimension) = RAM - 2 Y
- **F175** = order dimension stop sealing frame
 = RIM (Internal frame dimension) = RAM - 2W
- **F188** = order dimension medial gasket frame
 = FR +/-0.5 (frame rebate) = FAM - 12



Overview and selection
Ventilation flap – accessories
LF 170/300

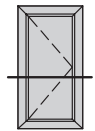


Overview and selection
Ventilation flap – accessories
LF 170/300

Overview and selection cover (inner and outer shell), synthetic corner sealing piece and moulded part for interior stop gasket

	Operation type	Surface	LF 170		LF 300		PU
			No. 210470		No. 210471		6 m
			DIN Right	DIN Left	DIN Right	DIN Left	
Cover inner shell	handle operation	black anodised E6/C35	2x 224871		2x 224873		1 pc(s)
	single motor	black anodised E6/C35	224881	224883	224885	224887	1 pc(s)
	low sash		224871	224871	224873	224873	1 pc(s)
	tandem motor	black anodised E6/C35	224881	224883	224885	224887	1 pc(s)
	high sash		224883	224881	224887	224885	1 pc(s)
Fastening screws			4x 908018		2x 908018		100 pc(s)
Cover inner shell					4x 906034		100 pc(s)
Outer shell			236333		236335		6 m
Fastening screws			2x 908947				100 pc(s)
Outer shell							
Cover outer shell		mill finished	224900		224904		2 pc(s)
Turning sash		black anodised E6/C35	224901		224905		2 pc(s)
Fastening screws			4x 908947		6x 908947		100 pc(s)
Cover outer shell							
Synthetic sealing piece			4x 224859				4 pc(s)
Fastening screws			4x 902550				100 pc(s)
Synthetic sealing piece							
Interior stop gasket		moulded part EPDM coated sliding polymer	2x 220619.170		2x 220619.300		2 pc(s)

Thermal insulation
Movable cross section: Ventilation flap
Determination of the U_{eq} values



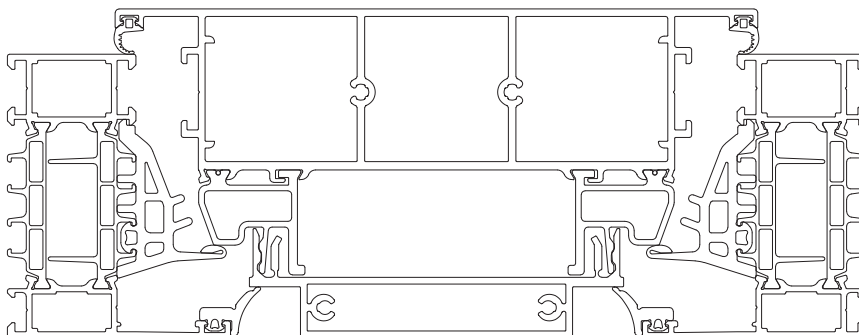
Insulation principle

Height of insulating web	27 mm / 44 mm
Material of insulating web	THERMORIT / PA
Insulation zone	Insulation insertion / Air chamber
Surface of insulation zone	Slightly oxidized $\epsilon = 0.3$
Gaskets	Insulating block medial gasket

■ **Technical information**

– * interior view in brackets

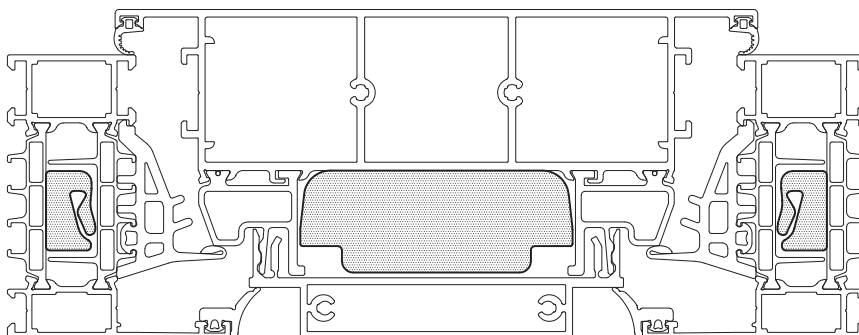
Without insulation insertion



Ventilation flap	Frame*						
	214504 (34)	214506 (44)	214508 (54)	214512 (74)	214519 (100)	214520 (125)	214530 (250)
210470 (170)	2.4 / 227	2.3 / 247	2.4 / 267	2.3 / 307	2.2 / 359	2.2 / 409	2.0 / 659
210471 (300)	2.5 / 357	2.4 / 377	2.5 / 397	2.4 / 437	2.3 / 489	2.3 / 539	2.1 / 789

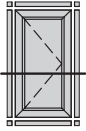
U_{eq} value: $W/(m^2K)$ /width of combination: mm

With insulation insertion



Ventilation flap	Frame*						
	214504 (34)	214506 (44)	214508 (54)	214512 (74)	214519 (100)	214520 (125)	214530 (250)
210470 (170)	1.7 / 227	1.7 / 247	1.6 / 267	1.5 / 307	1.4 / 359	1.3 / 409	1.0 / 659
210471 (300)	1.4 / 357	1.4 / 377	1.4 / 397	1.3 / 437	1.2 / 489	1.2 / 539	1.0 / 789

U_{eq} value: $W/(m^2K)$ /width of combination: mm



Thermal insulation
Movable cross section: Ventilation flap
Determination of the U_{eq} values

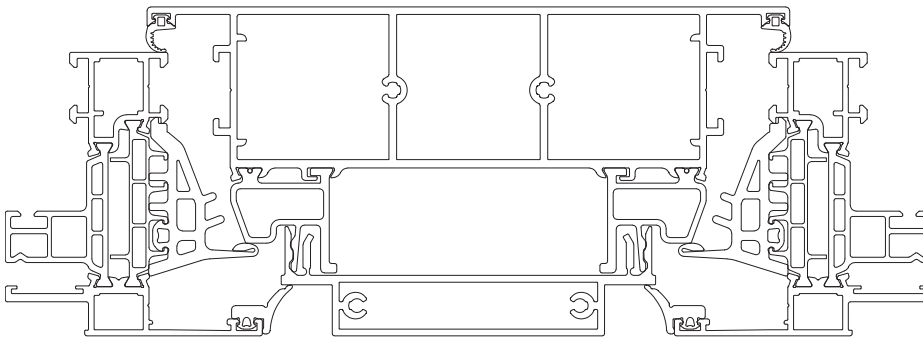
Insulation principle

Height of insulating web	27 mm / 38 mm / 44 mm
Material of insulating web	THERMORIT / PA
Insulation zone	Insulation insertion / Air chamber
Surface of insulation zone	Slightly oxidized $\epsilon = 0.3$
Gaskets	EPDM medial gasket / Insulating block medial gasket

■ **Technical information**

– * interior view in brackets

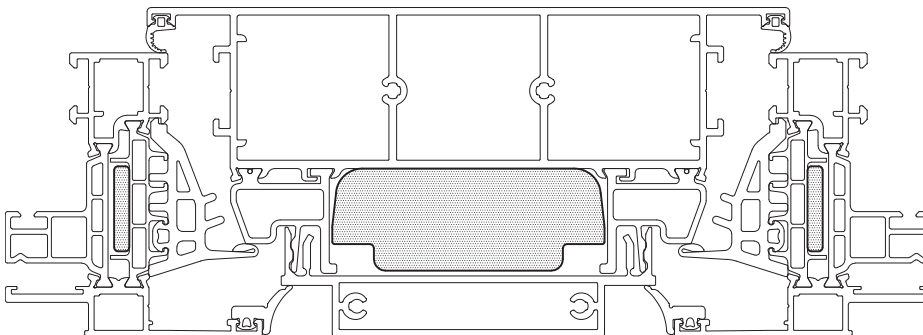
Without insulation insertion



Ventilation flap	Frame*	
	214666 (47-24)	214670 (47-36)
210470 (170)	2.5 / 211	2.5 / 211
210471 (300)	2.6 / 341	2.6 / 341

U_{eq} value: $W/(m^2K)$ /width of combination: mm

With insulation insertion



Ventilation flap	Frame*	
	214504 (34)	214506 (44)
210470 (170)	1.9 / 211	1.9 / 211
210471 (300)	1.5 / 341	1.5 / 341

U_{eq} value: $W/(m^2K)$ /width of combination: mm

