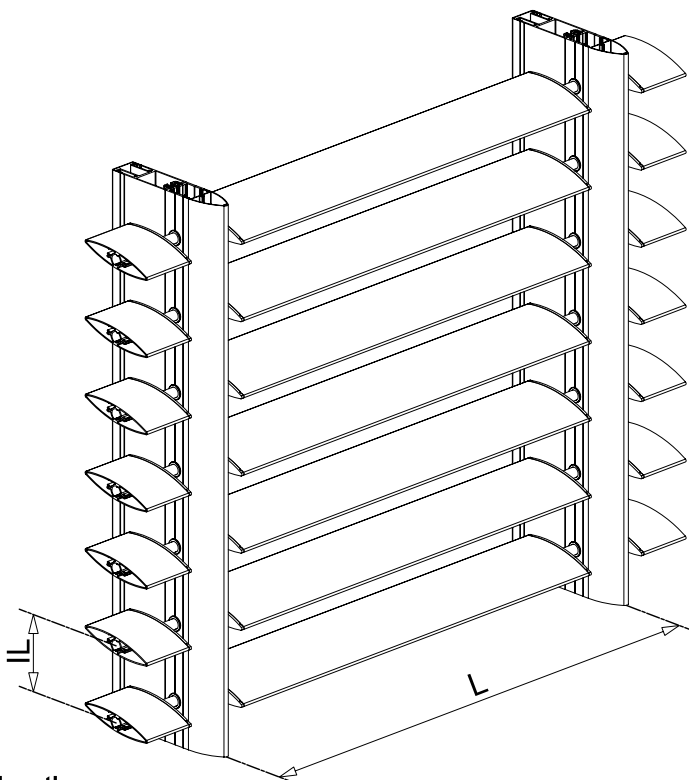




ACTUATOR UTILISATION LIMITS HORIZONTAL TYPOLOGY



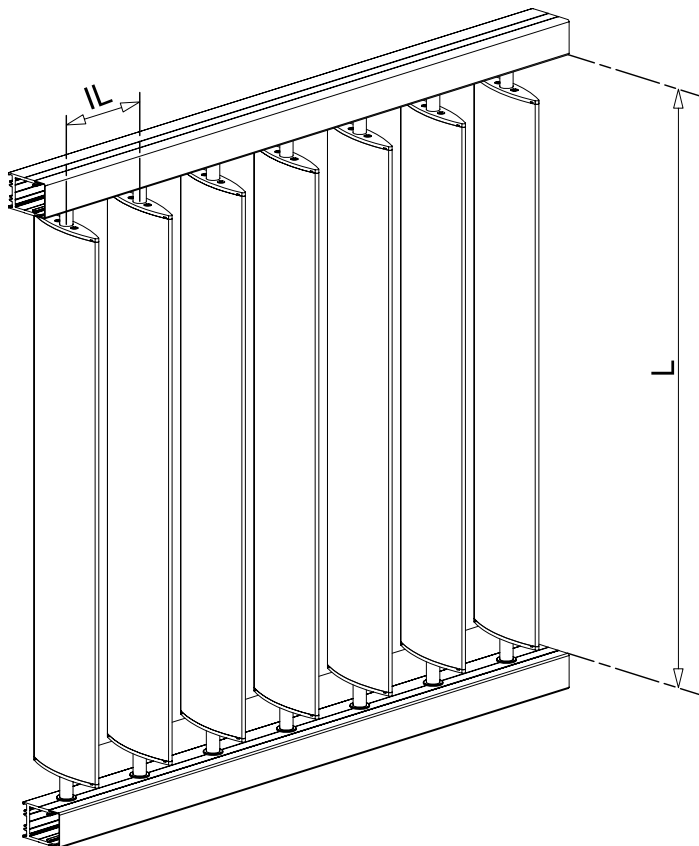
L = Maximum blade length

IL = Blade interaxis (Refer to table 64 Em 06)

Blade	Width	Load (kg/m ²)							Actuator
			50	80	120	150	200	300	
NC 0300	100	L	2800	2400	2000	1900	1700	1250	650 N
		m ²	9	7	6	6	5	4	
NC 0302	150	L	3000	2600	2300	2100	1900	1700	650 N
		m ²	9	8	7	6	6	5	
NC 0303	200	L	3500	2900	2600	2400	2200	1800	650 N
		m ²	11	9	8	7	7	5	
NC 0305	250	L	3800	3300	2900	2650	2400	1900	650 N
		m ²	12	10	9	8	7	6	
NC 0306	300	L	4180	3600	3100	2900	2600	2300	650 N
		m ²	13	11	10	9	8	7	
NC 0313	300	L	6100	5250	4600	4300	3700	2500	650 N
		m ²	20	17	15	14	12	8	
NC 0318	300	L	3150	2700	2350	2200	2000	1700	650 N
		m ²	10	8	7	7	6	5	
NC 0309	350	L	4500	3900	3400	3100	2800	2500	650 N
		m ²	14	12	11	10	9	8	
NC 0317	370	L	5270	5270	5270	5270	5270	5270	650 N
		m ²	17	17	17	17	17	10	
NC 0311	400	L	5150	4400	3800	3600	3250	2800	650 N
		m ²	16	14	12	11	10	9	
NC 0310	450	L	6500	5750	5000	4700	4250	3500	650 N
		m ²	21	18	16	15	14	11	



ACTUATOR UTILISATION LIMITS VERTICAL TOPOLOGY



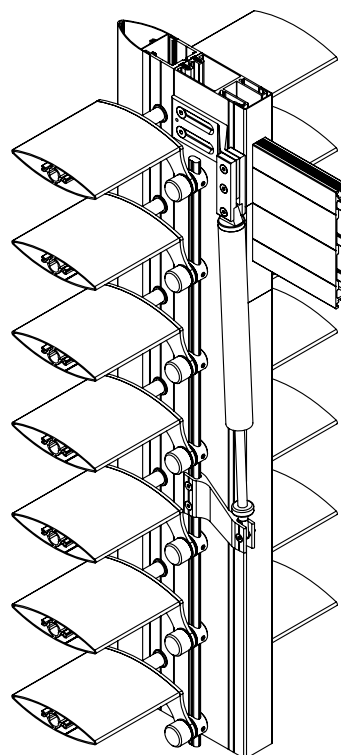
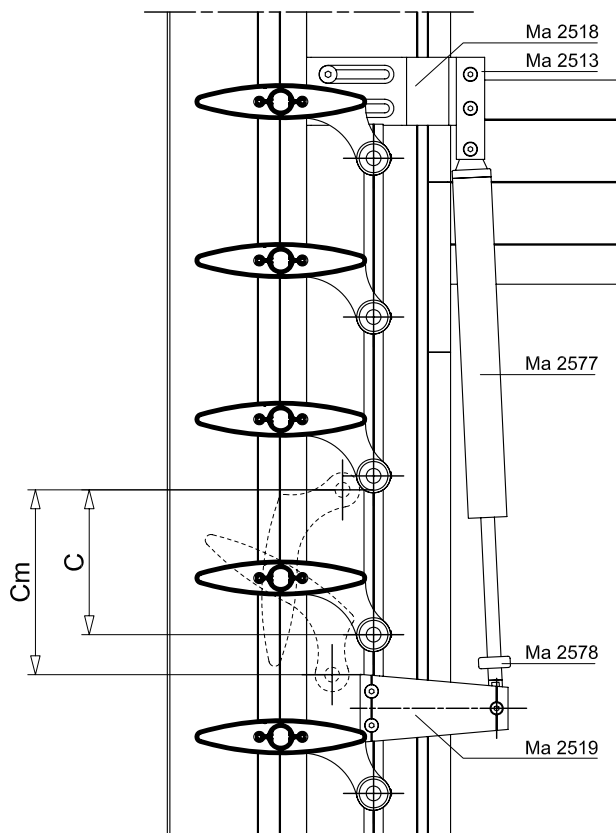
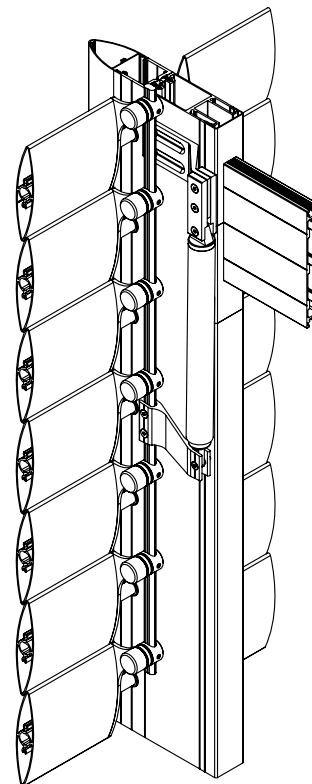
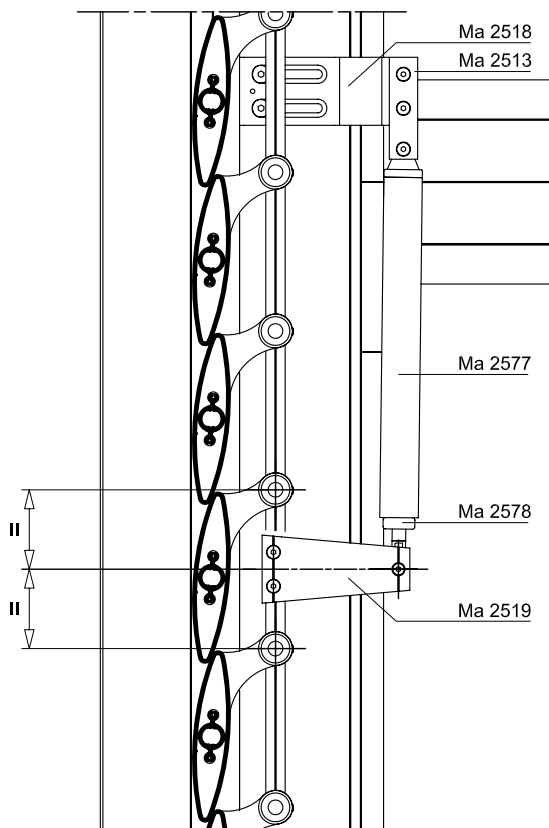
L = Maximum blade length

IL = Blade interaxis (refer to table 64 Em 06)

Blade	Width	Load (kg/m ²)							Actuator
			50	80	120	150	200	300	
NC 0300	100	L	2800	2400	2000	1900	1700	1250	650 N
		m ²	9	7	6	6	5	4	
NC 0302	150	L	3000	2600	2300	2100	1900	1700	650 N
		m ²	9	8	7	6	6	5	
NC 0303	200	L	3450	2950	2600	2400	2150	1800	650 N
		m ²	11	9	8	7	7	5	
NC 0305	250	L	4500	3850	3400	3100	2850	2200	650 N
		m ²	12	10	9	8	7	6	
NC 0306	300	L	4180	3600	3100	2900	2600	2300	650 N
		m ²	13	11	10	9	8	7	
NC 0313	300	L	6100	5250	4600	4300	3700	2500	650 N
		m ²	20	17	15	14	12	8	
NC 0318	300	L	3150	2700	2350	2200	2000	1700	650 N
		m ²	10	8	7	7	6	5	
NC 0309	350	L	3850	3300	2850	2650	2400	2100	650 N
		m ²	14	12	11	10	9	8	
NC 0311	400	L	5150	4400	3800	3600	3250	2800	650 N
		m ²	16	14	12	11	10	9	
NC 0310	450	L	6500	5750	5000	4700	4250	3550	650 N
		m ²	21	18	16	15	14	11	



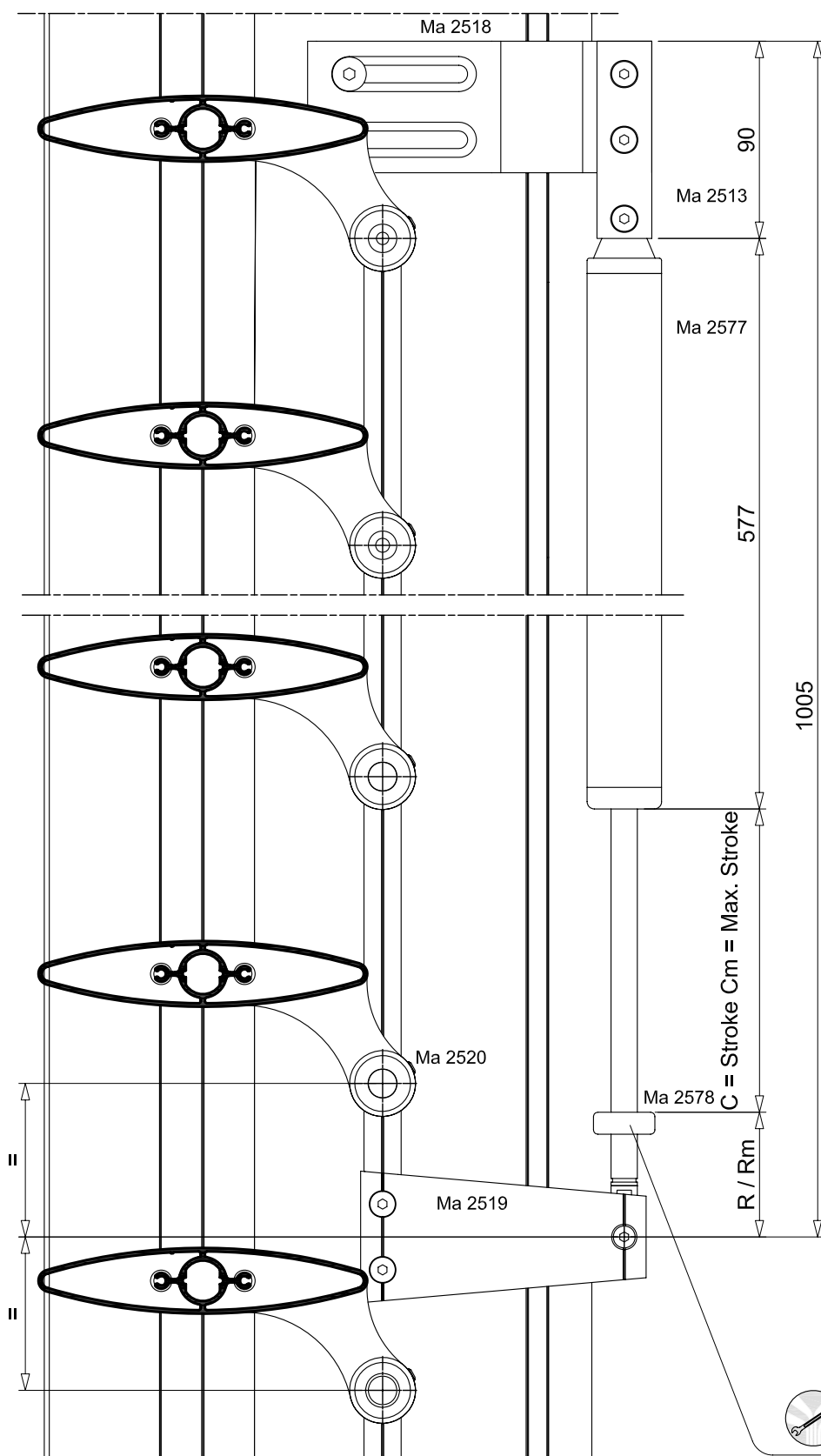
BLADE MOVEMENT - HORIZONTAL SUNBLADE



C: Actuator stroke. Cm: Maximum stroke. For specific information refer to table Em08 a Em19



BLADE MOVEMENT



Accessories for movement

Necessary	Optional
Ma 2513	Ma 2579
Ma 2518	Ma 2580
Ma 2519	Ma 2581
Ma 2577	Ma 2582
Ma 2578	Ma 2583
	Ma 2584

Installing Order

- 1 Fix Ma 2519
- 2 Place blade in an open position
- 3 Place the actuator in an open position
- 4 Connect Ma 2513 with Ma 2518 and fix
- 5 Fix Ma 2578 as per stroke

Blade	C	R	Cm	Rm
NC 0300	99	239	120	218
NC 0302	129	209	163	175
NC 0303	120	218	151	187
NC 0305	144	194	186	152
NC 0306				
NC 0313	173	165	219	119
NC 0318				
NC 0329	173	165	219	119
NC 0309	202	136	261	77
NC 0317	191	147	250	88
NC 0311	227	111	298	40
NC 0310	232	106	300	38*

* Max. stroke remains without fixing limiter Ma 2578



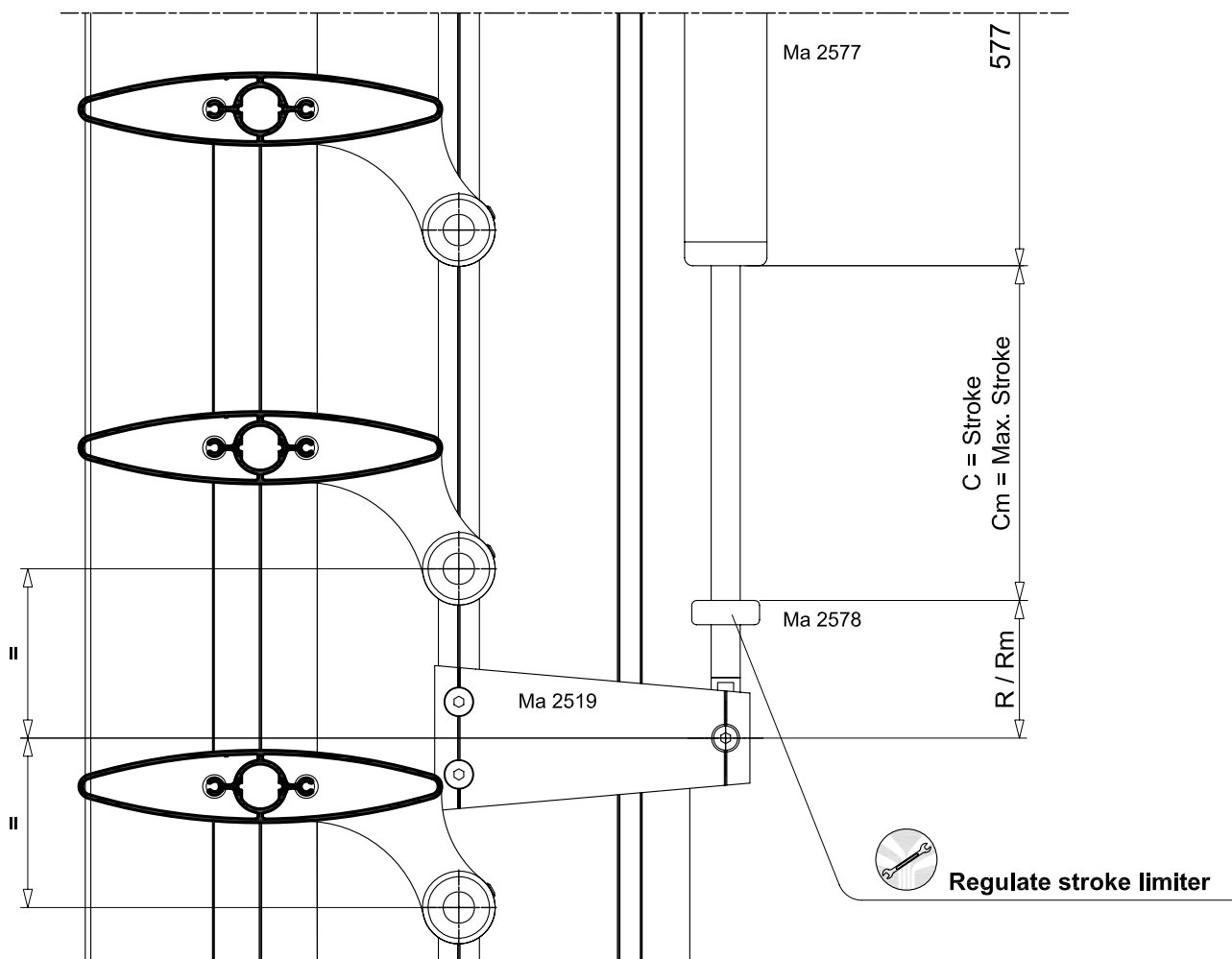
Regulate stroke limiter

Stroke C / Remains R Max. Stroke Cm / Remains Rm

Positioning of accessories for movement connection

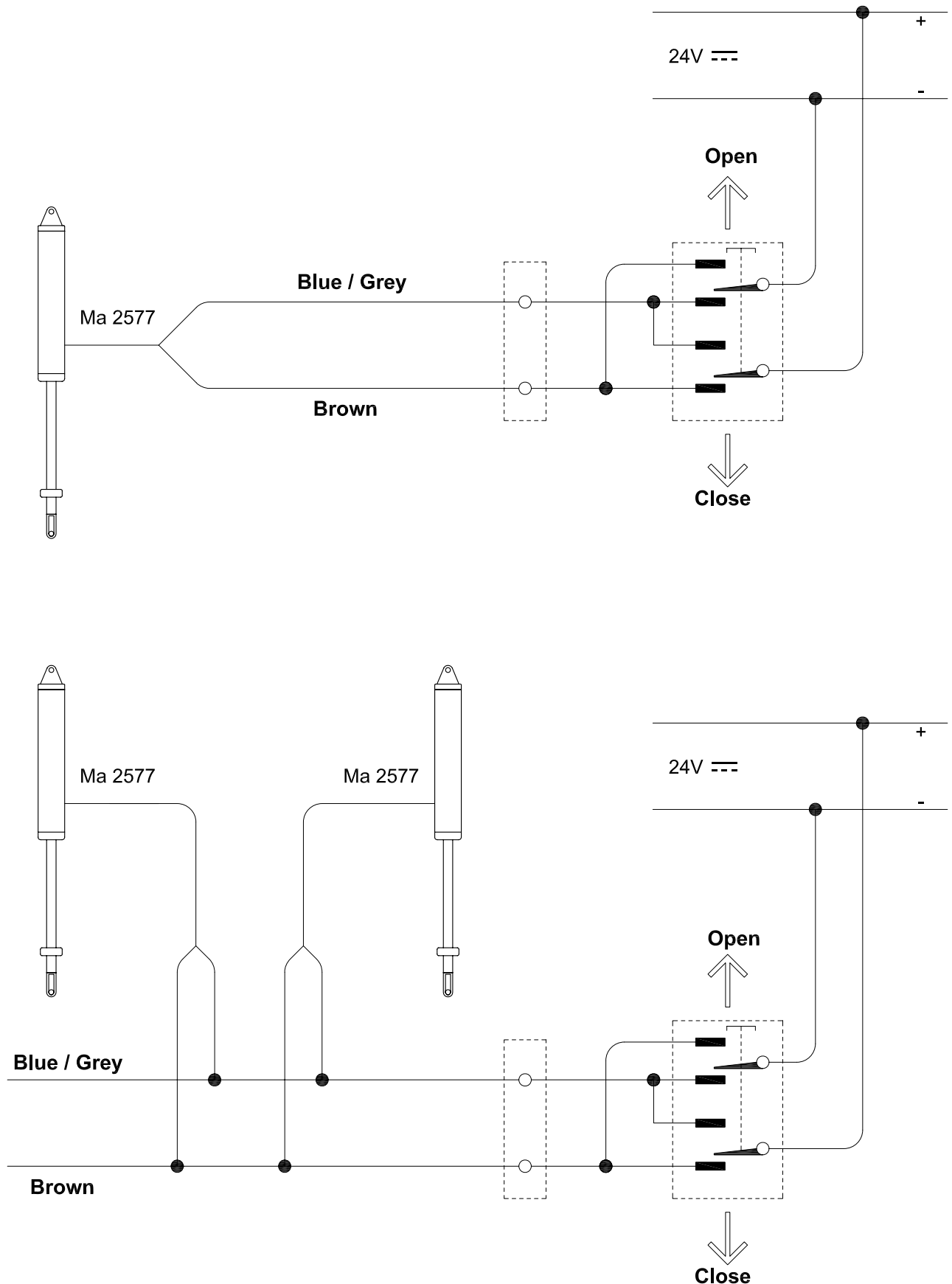


BLADE MOVEMENT - ACTUATOR LIMITS



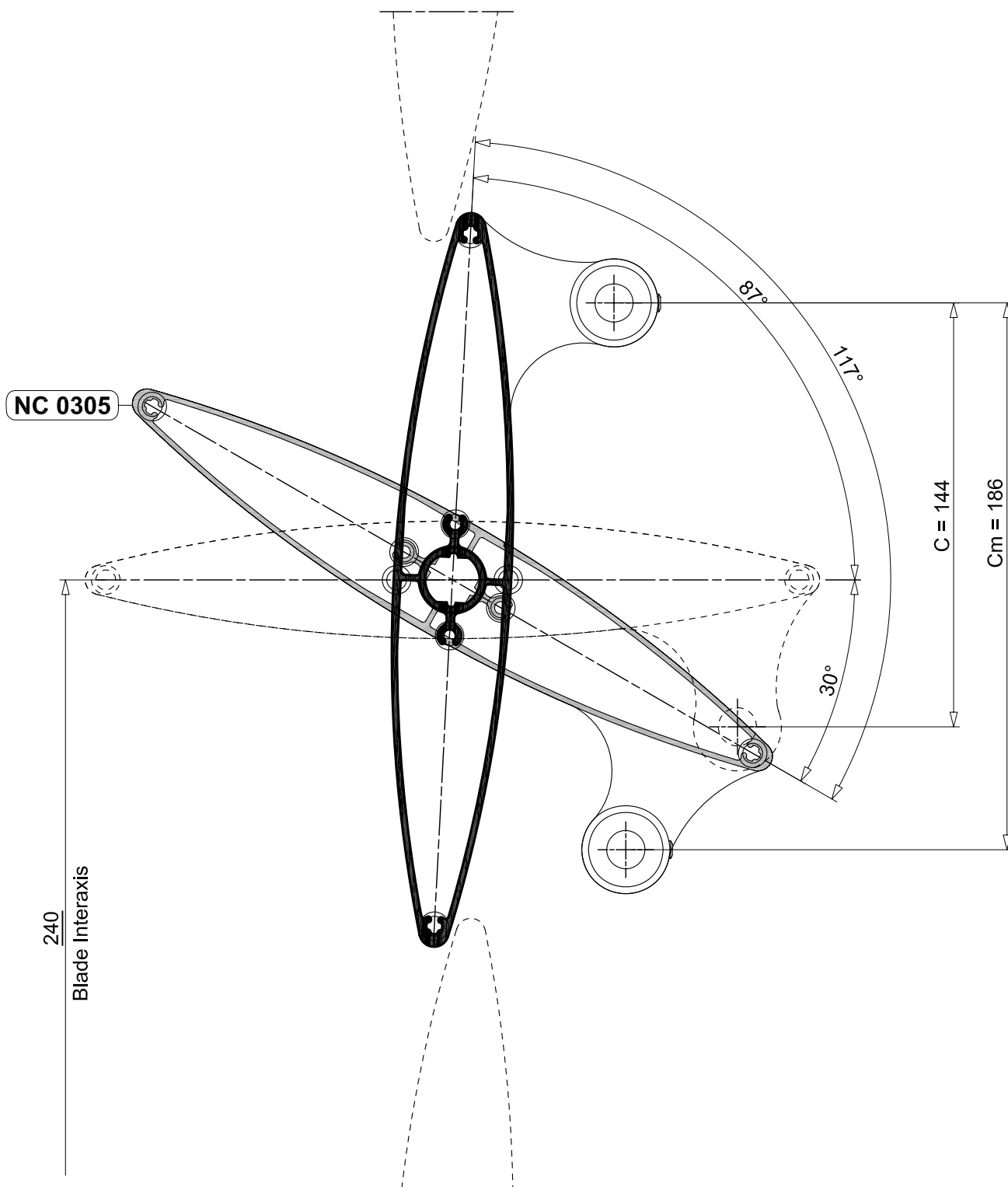
Blade	Shape	Width	Interaxis	Actuator	Stroke C	Remains R	Stroke Limlter	Stroke Cm	Remains Rm	Stroke Limlter
NC 0300		100	90	Ma 2577	99	239	Ma 2578	120	218	Ma 2578
NC 0302		150	140		129	209		163	175	
NC 0303		200	190		120	218		151	187	
NC 0305		250	240		144	194		186	152	
NC 0306		300	290		173	165		219	119	
NC 0313										
NC 0318										
NC 0329		300	320 - 340		173	165		219	119	
NC 0309		350	340		202	136		261	77	
NC 0317		370	360		191	147		250	88	
NC 0311		400	390		227	111		298	40	
NC 0310		450	440		232	106		300	38	—

BLADE MOVEMENT - ELECTRIC DIAGRAM





BLADE MOVEMENT



C: Standard Stroke. Cm: Maximum Stroke.



NB:
STROKE MEASURES ARE RELATED TO BLADE INTERAXIS.

SCALE 1:2

FIXING TO WALL

Group F



WALL FITTING LOWER FITTING

PROFILE - GASKETS		CS 4751 CUTTING MEASUREMENTS
NC 0321		54 mm
Mg 512D		216 mm
NC 0322		104 mm
Mg 512D		416 mm

ISO 4032 M12
Not supplied by METRA

ISO 7089 12 140 HV
Not supplied by METRA

NC 0321

hole Ø 12.5

ISO 4014 M12 x 65
Not supplied by METRA

CS 4751

Ma 4017

Obtained from
A 1181

Ma 4017

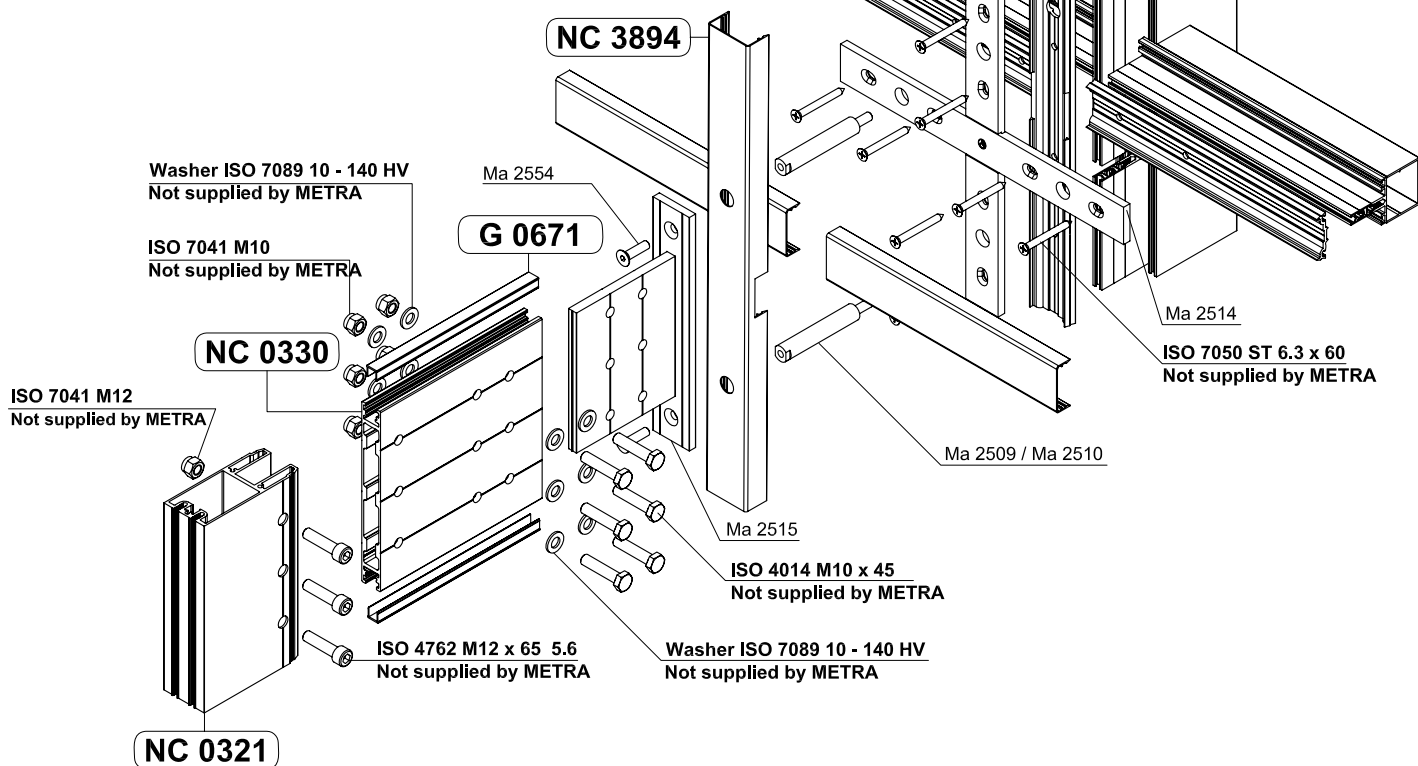
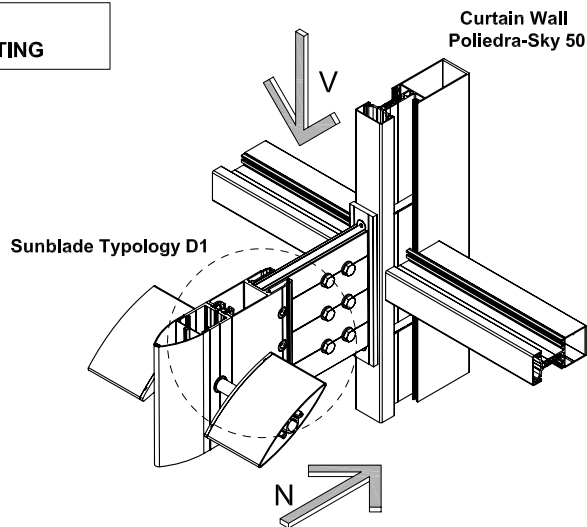
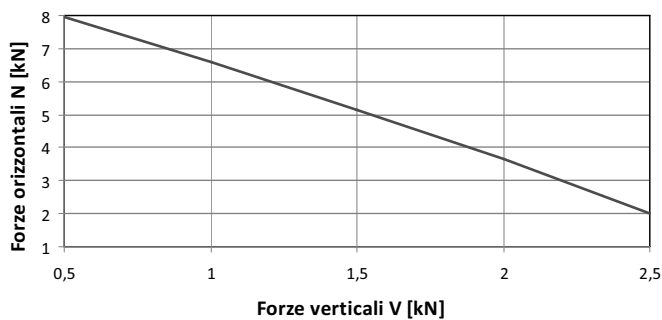


WALL FITTING CURTAIN WALL FITTING



IMPORTANT:
Wall fitting interaxis as per static requirements

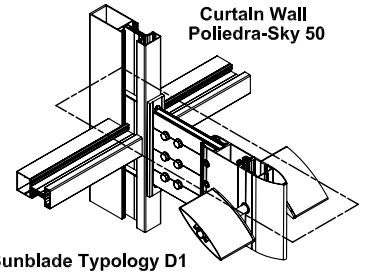
Carichi massimi applicabili a Ma2515+NC0330



****:** Indicative values only - Have a qualified technician verify static calculations during implementation phase.



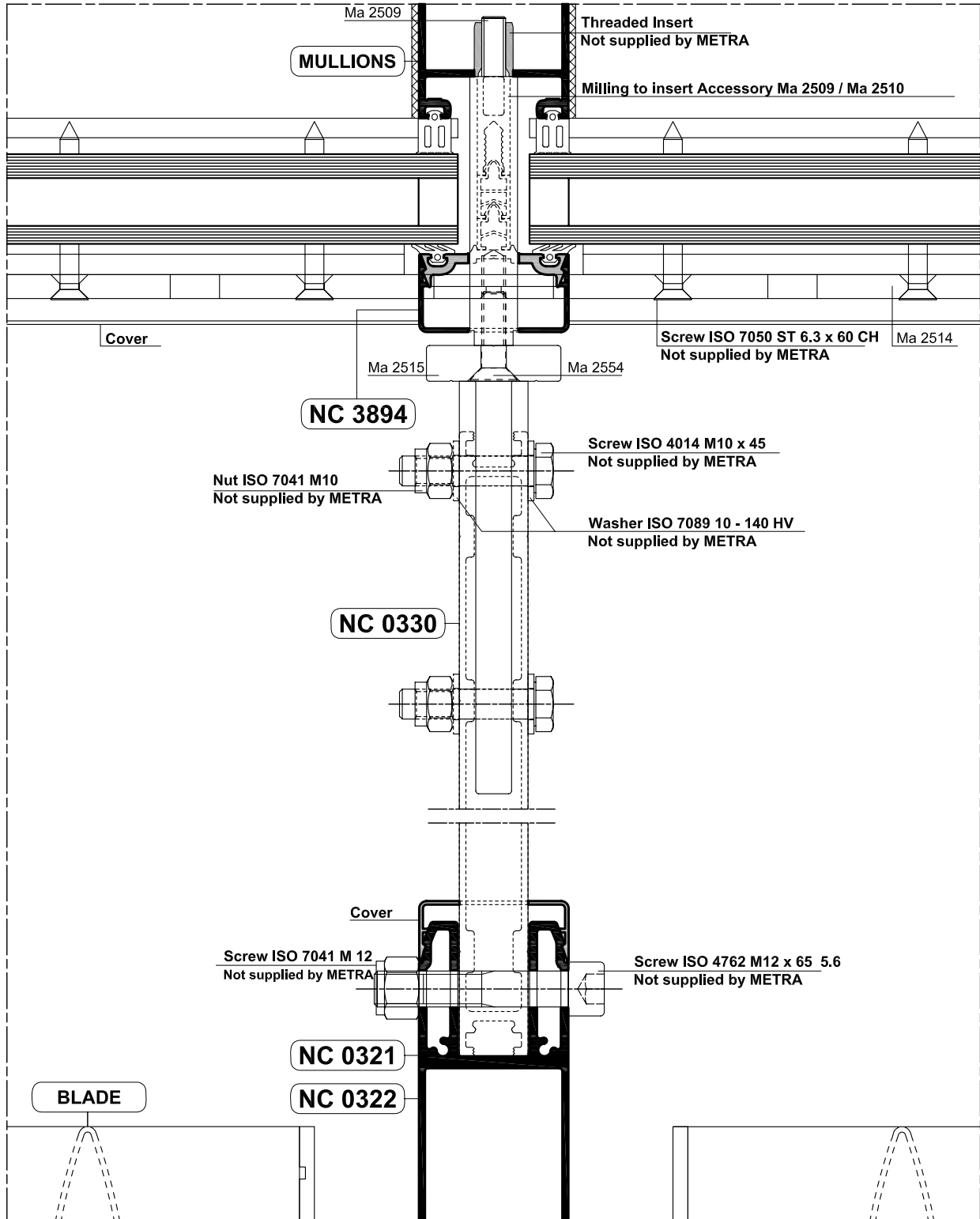
WALL FITTING CURTAIN WALL FITTING



UTILISATION OF FIXING ACCESSORIES:

Ma 2509: For curtain walls with glazing upto 30 mm

Ma 2510: For curtain walls with glazing from 30 to 45 mm



For specific information about the machining refer to tables 64 E12 - 64E18

SCALE 1:2



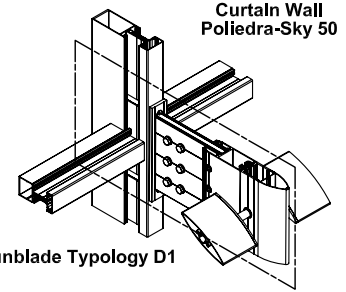
WALL FITTING CURTAIN WALL FITTING



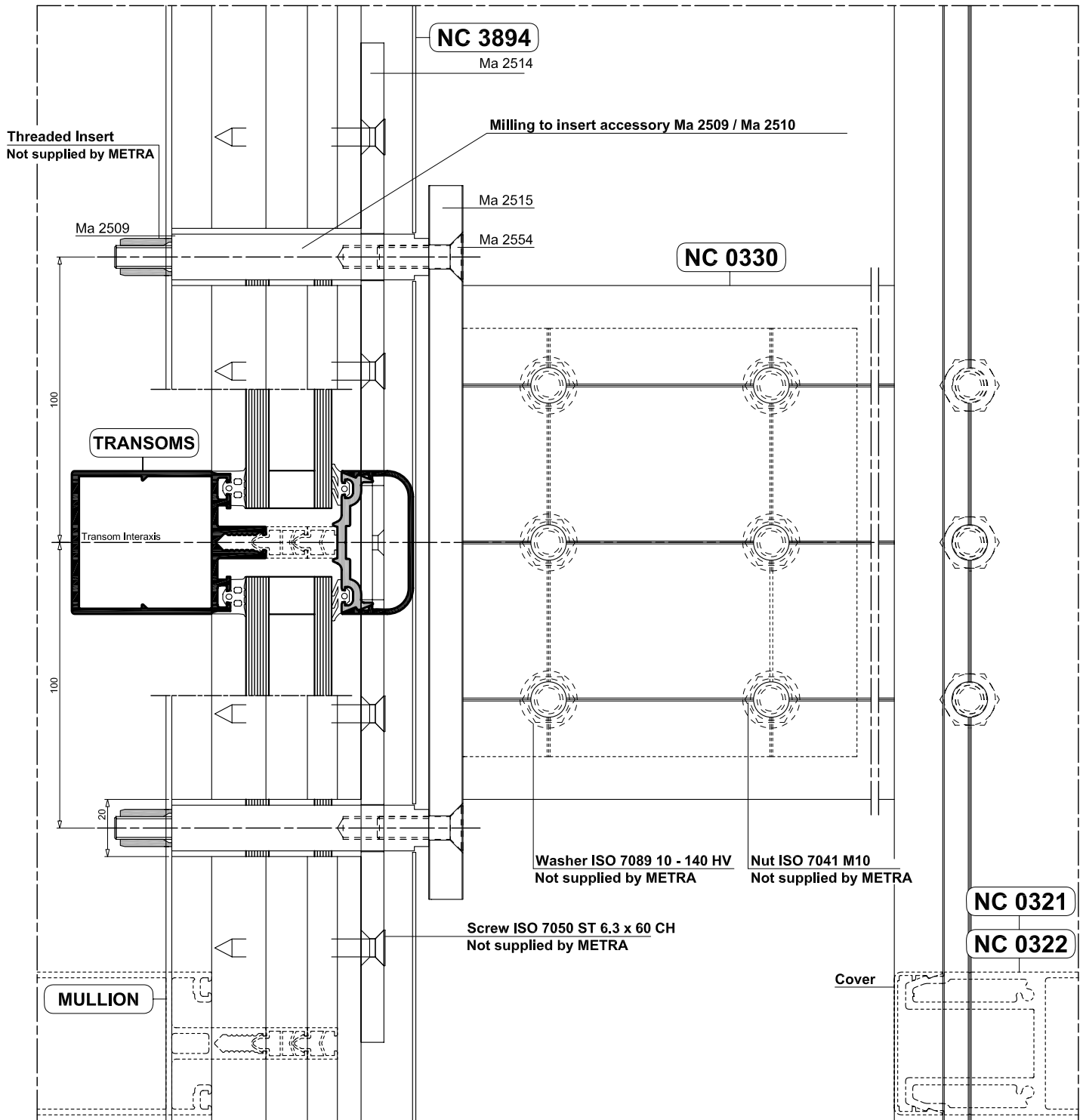
UTILISATION OF FIXING ACCESSORIES:

Ma 2509: For curtain walls with glazing up to a 30 mm

Ma 2510: For curtain walls with glazing from 30 to 45 mm



Sunblade Typology D1



For specific information about machining refer to tables 64 E12 - 64E18

SCALE 1:2