STRUCTURAL REPORT

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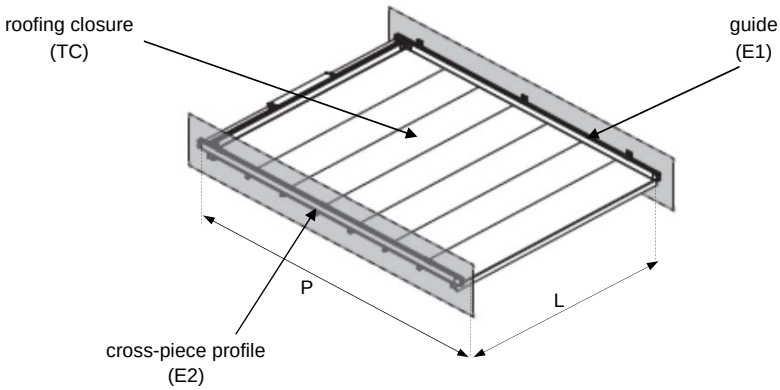
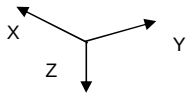
TECNIC

tridimensional view



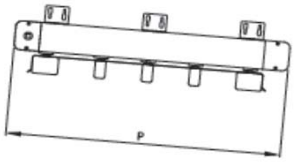
reference axes
X-axis direction P
Y-axis direction L



P direction
L depth

TECNIC 1 span

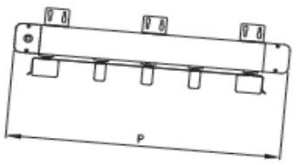
lateral view



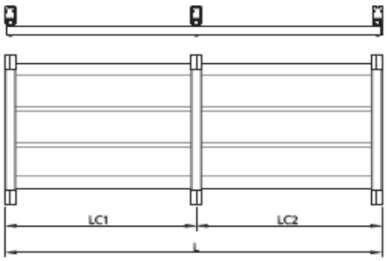
map

TECNIC 2 spans

lateral view

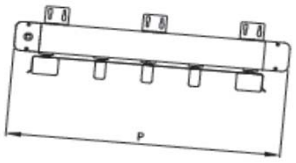


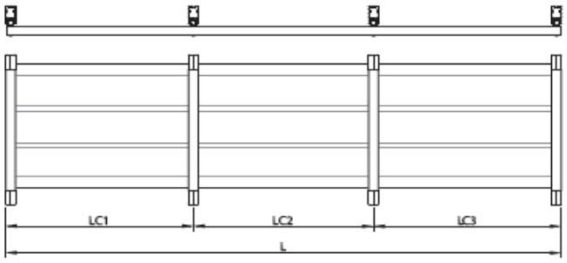
map



TECNIC 3 spans

lateral view

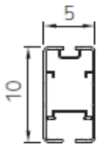


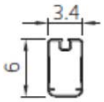


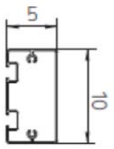
Frame profiles

guide	E1
cross-piece profile	E2
support for (TT) hood	E3

guide (E1)	cross-piece profile (E2)	support for (TT) hood (E3)







Materials

extruded aluminum		
type	EN AW - 6060 T6	
steel		
type	Aisi 304 - Aisi 470 Li	
fasteners and bolts		
category	A2/70	(UNI EN ISO 3506-1:2009)

codes

UNI EN1990-1-1:2004	Eurocode 0 Basis of structural design
UNI EN1991-1-1:2004	Eurocode 1 Actions on structures, Part 1-1 and 1-3 (2004), 1-4 (2005)
UNI EN1998-1 :2005	Eurocode 8 Design of structures for earthquake resistance, Part 1
UNI EN1999-1-1:2002	Eurocode 9 Design of aluminium structures, Part 1-1: general rules
UNI EN 13561:2004	External blinds- Performance requirements including safety

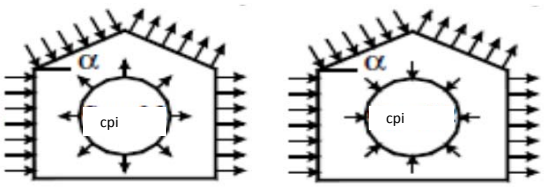
scheme of the wind action on the structure

structure with perimetral closure

in this condition the wind acts on the roofing and perimetral closure

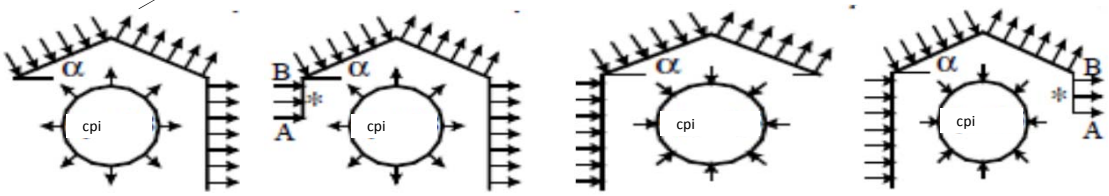
presence of openings < 33%

wind direction



presence of openings >= 33%

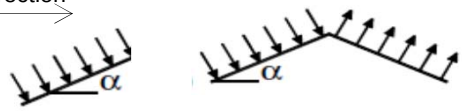
wind direction



structure without perimetral closure

in this condition the wind acts on the roofing closure and the elements

wind direction



Calculation ipothesys

category (ground) II corresponding to
"Area with low vegetation such as grass and isolated obstacles (trees, buildings) with separations of at least 20 obstacle heights"

Adopted static scheme

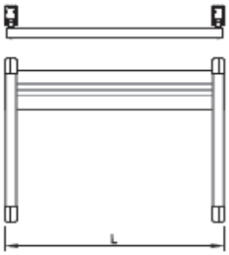
roofing elements: supported beam 1 span

CONDITIONS OF USE

load condition	closure roofing	table values
1	folded	beaufort
2	unfolded	beaufort

snow load considered only in condition 1

condition 1



condition 2

WIND RESISTANCE TABLE - Beaufort scale

load condition	closure roofing	table values
1	folded	beaufort
2	unfolded	beaufort

snow load considered only in condition 1

TECNIC 1 SPAN

CONDITION 1

depth P	width L 250	300	350	400	450	500	brackets
200	11	11	11	11	11	11	4
250	11	11	11	11	11	11	4
300	11	11	11	11	11	11	4
350	11	11	11	11	11	11	6
400	11	11	11	11	11	11	6
450	11	11	11	11	11	11	6
500	11	11	11	11	11	11	6
550	11	11	11	11	11	11	8
600	11	11	11	11	11	11	8
650	11	11	11	11	11	11	8
700	11	11	11	11	11	11	10
750	11	11	11	11	11	11	10
800	11	11	11	11	11	11	10

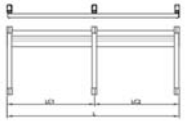
CONDITION 2

depth P	width L 250	300	350	400	450	500	brackets
200	11	10	9	8	8	7	4
250	11	10	9	8	8	7	4
300	11	10	9	8	8	7	4
350	11	10	9	8	8	7	6
400	11	10	9	8	8	7	6
450	11	10	9	8	8	7	6
500	11	10	9	8	8	7	6
550	11	10	9	8	8	7	8
600	11	10	9	8	8	7	8
650	11	10	9	8	8	7	8
700	11	10	9	8	8	7	10
750	11	10	9	8	8	7	10
800	11	10	9	8	8	7	10

TECNIC 2 SPANS

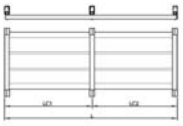
CONDITION 1

depth P	width L 500	550	600	650	700	750	800	850	900	brackets
200	11	11	11	11	11	11	11	11	11	6
250	11	11	11	11	11	11	11	11	11	6
300	11	11	11	11	11	11	11	11	11	6
350	11	11	11	11	11	11	11	11	11	9
400	11	11	11	11	11	11	11	11	11	9
450	11	11	11	11	11	11	11	11	11	9
500	11	11	11	11	11	11	11	11	11	9
550	11	11	11	11	11	11	11	11	11	12
600	11	11	11	11	11	11	11	11	11	12
650	11	11	11	11	11	11	11	11	11	12
700	11	11	11	11	11	11	11	11	11	15
750	11	11	11	11	11	11	11	11	11	15
800	11	11	11	11	11	11	11	11	11	15



CONDITION 2

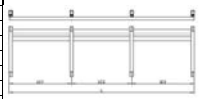
depth P	width L 500	550	600	650	700	750	800	850	900	brackets
200	10	9	8	8	8	8	8	8	8	6
250	10	9	8	8	8	8	8	8	8	6
300	10	9	8	8	8	8	8	8	8	6
350	10	9	8	8	8	8	8	8	8	9
400	10	9	8	8	8	8	8	8	8	9
450	10	9	8	8	8	8	8	8	8	9
500	10	9	8	8	8	8	8	8	8	9
550	10	9	8	8	8	8	8	8	8	12
600	10	9	8	8	8	8	8	8	8	12
650	10	9	8	8	8	8	8	8	8	12
700	10	9	8	8	8	8	8	8	8	15
750	10	9	8	8	8	8	8	8	8	15
800	10	9	8	8	8	8	8	8	8	15



TECNIC 3 SPANS

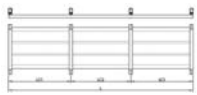
CONDITION 1

depth P	width L 900	950	1000	1050	1100	1150	1200	1250	1300	brackets
200	11	11	11	11	11	11	11	11	11	8
250	11	11	11	11	11	11	11	11	11	8
300	11	11	11	11	11	11	11	11	11	8
350	11	11	11	11	11	11	11	11	11	12
400	11	11	11	11	11	11	11	11	11	12
450	11	11	11	11	11	11	11	11	11	12
500	11	11	11	11	11	11	11	11	11	12
550	11	11	11	11	11	11	11	11	11	16
600	11	11	11	11	11	11	11	11	11	16
650	11	11	11	11	11	11	11	11	11	16
700	11	11	11	11	11	11	11	11	11	20
750	11	11	11	11	11	11	11	11	11	20
800	11	11	11	11	11	11	11	11	11	20



CONDITION 2

depth P	width L 900	950	1000	1050	1100	1150	1200	1250	1300	brackets
200	8	8	8	8	8	8	8	8	8	8
250	8	8	8	8	8	8	8	8	8	8
300	8	8	8	8	8	8	8	8	8	8
350	8	8	8	8	8	8	8	8	8	12
400	8	8	8	8	8	8	8	8	8	12
450	8	8	8	8	8	8	8	8	8	12
500	8	8	8	8	8	8	8	8	8	12
550	8	8	8	8	8	8	8	8	8	16
600	8	8	8	8	8	8	8	8	8	16
650	8	8	8	8	8	8	8	8	8	16
700	8	8	8	8	8	8	8	8	8	20
750	8	8	8	8	8	8	8	8	8	20
800	8	8	8	8	8	8	8	8	8	20



MAXIMUM SNOW LOAD (1 DaN = 1 Kg)

the maximum snow load on the structure with folded roofing closure is

qn =	80	DaN/m2	azione neve
gn =	200	DaN/m3	snow specific weight
hmax =	40	cm	snow maximum height

ANCHOR BOLT ACTION AT THE FIXING TO THE WALL

The number of anchor bolts considered in the calculation is 2
the maximum actions acting on a single anchor bolt are

F =	0	DaN	traction
V =	300	DaN	shear

For a correct determination of the anchor type to adopte

a) identify the type of the wall/floor to which link the structure(concrete, masonry,…)
b) from the producer's handbook select the anchors related to the material to which the structure is linked
c) identify the design resistance of the adopted anchor in the producer's handbook table
d) confront this reduced resistance with the acting force

SEISMIC CERTIFICATION

It is not considered the seismic verification of the structure

ing Alessandro Nutta