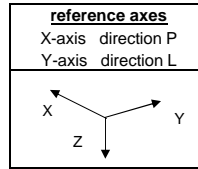
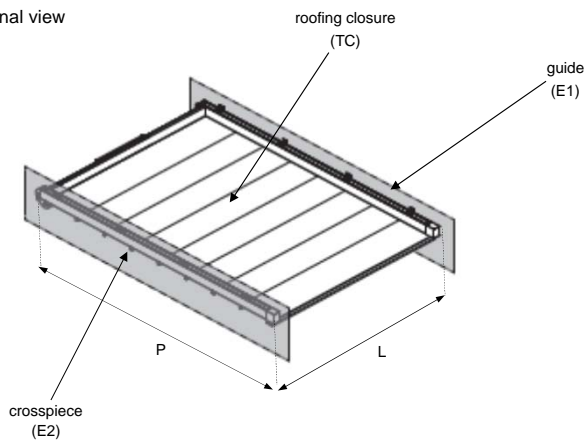


STRUCTURAL REPORT

Pratic
THE OPEN AIR CULTURE
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ONE

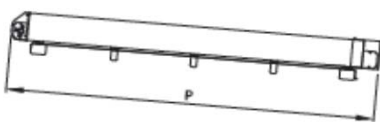
3D view



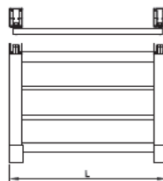
P direction
L depth

ONE 1 span

lateral view

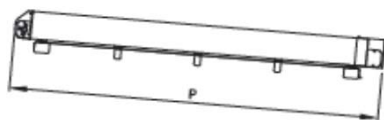


map

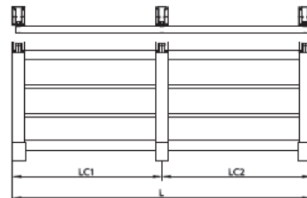


ONE 2 spans

lateral view

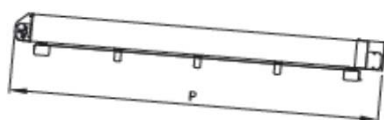


map

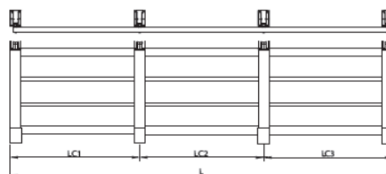


ONE 3 spans

lateral view



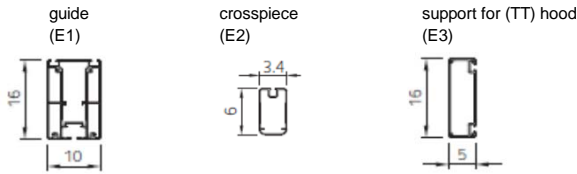
map



Frame profiles

guide
crosspiece
support for (TT) hood

E1
E2
E3



Materials

extruded aluminum

type EN AW - 6060 T6 - EN AW - 6063 T6

steel

type Aisi 304 - Aisi 470 Li

fasteners and bolts

category A2/70 (UNI EN ISO 3506-1:2009)

codes

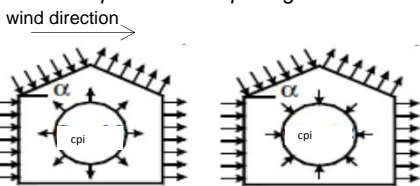
UNI EN 1990:2006	Eurocode 0 Basis of structural design
UNI EN 1991-1	Eurocode 1 Actions on structures, Part 1-1 and 1-3 (2004), 1-4 (2005)
UNI EN 1998-1:2005	Eurocode 8 Design of structures for earthquake resistance, Part 1
UNI EN 1999-1-1:2007	Eurocode 9 Design of aluminium structures, Part 1-1: general rules
UNI EN 13561:2004	External blinds- Performance requirements including safety

scheme of the wind action on the structure

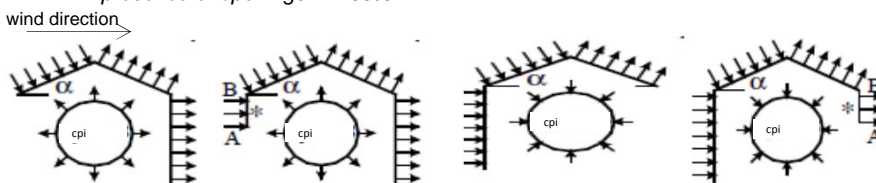
structure with perimetral closure

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

presence of openings < 33%

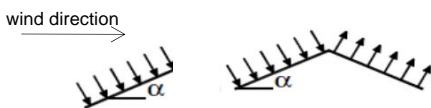


presence of openings >= 33%



structure without perimetral closure

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



Calculation ipothesis

The structure has been evaluated with the following calculation ipothesis

h = 2,30 m height at the guide bottom side

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

WIND RESISTANCE TABLE - Beaufort scale

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

snow load considered only in condition 1

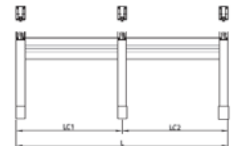
ONE 1 SPAN							
CONDITION 1							
depth P	width L						brackets
	250	300	350	400	450	500	
200	11	11	11	11	11	11	4
250	11	11	11	11	11	11	4
300	11	11	11	11	11	11	4
350	11	11	11	11	11	11	6
400	11	11	11	11	11	11	6
450	11	11	11	11	11	11	6
500	11	11	11	11	11	11	6
550	11	11	11	11	11	11	8
600	11	11	11	11	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
850	11	11	11	11	11	11	12
900	11	11	11	11	11	11	12



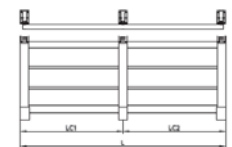
CONDITION 2							
depth P	width L						brackets
	250	300	350	400	450	500	
200	11	10	9	8	7	7	4
250	11	10	9	8	7	7	4
300	11	10	9	8	7	7	4
350	11	10	9	8	7	7	6
400	11	10	9	8	7	7	6
450	11	10	9	8	7	7	6
500	11	10	9	8	7	7	6
550	11	10	9	8	7	7	8
600	11	10	9	8	7	7	8
650	11	10	9	8	7	7	8
700	11	10	8	8	7	7	10
750	11	10	9	8	7	7	10
800	11	10	9	8	7	7	10
850	11	10	9	8	7	7	12
900	11	10	9	8	7	7	12



ONE 2 SPANS										
CONDITION 1										
depth P	width L									brackets
	500	550	600	650	700	750	800	850	900	
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
850	11	11	11	11	11	11	11	11	11	18
900	11	11	11	11	11	11	11	11	11	18

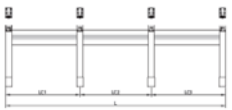


CONDITION 2										
depth P	width L									brackets
	500	550	600	650	700	750	800	850	900	
200	11	9	8	8	8	8	8	8	8	6
250	11	9	8	8	8	8	8	8	8	6
300	11	9	8	8	8	8	8	8	8	6
350	11	9	8	8	8	8	8	8	8	9
400	11	9	8	8	8	8	8	8	8	9
450	11	9	8	8	8	8	8	8	8	9
500	11	9	8	8	8	8	8	8	8	9
550	11	9	8	8	8	8	8	8	8	12
600	11	9	8	8	8	8	8	8	8	12
650	11	9	8	8	8	8	8	8	8	12
700	11	9	8	8	8	8	8	8	8	15
750	11	9	8	8	8	8	8	8	8	15
800	11	9	8	8	8	8	8	8	8	15
850	11	9	8	8	8	8	8	8	8	18
900	11	9	8	8	8	8	8	8	8	18

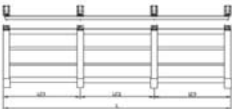


ONE 3 SPANS

CONDITION 1										
depth P	width L									brackets
	900	950	1000	1050	1100	1150	1200	1250	1300	
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
850	11	11	11	11	11	11	11	11	11	24
900	11	11	11	11	11	11	11	11	11	24



CONDITION 2										
depth P	width L									brackets
	900	950	1000	1050	1100	1150	1200	1250	1300	
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
850	8	8	8	8	8	8	8	8	8	24
900	8	8	8	8	8	8	8	8	8	24



MAXIMUM SNOW LOAD

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

$q_n =$	120 DaN/m ²	snow action
$g_n =$	200 DaN/m ³	snow specific weight
$h_{max} =$	60 cm	snow maximum height

ANCHOR BOLT ACTION AT THE FIXING TO THE WALL

$F =$	0 DaN	traction
$V =$	350 DaN	shear

For a correct determination of the anchor type to adopte

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

SEISMIC CERTIFICATION

It is not considered the seismic verification of the structure

ing Alessandro Nutta

