



Firenze fiero
Congress and Exhibition Center

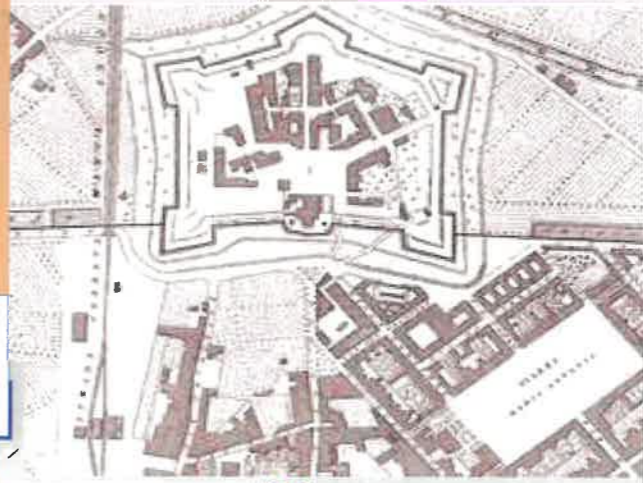


REV.

January 2024

 **ENGLISH VERSION**
REVIEW OF LOADS
PLANTING THE BOARDS

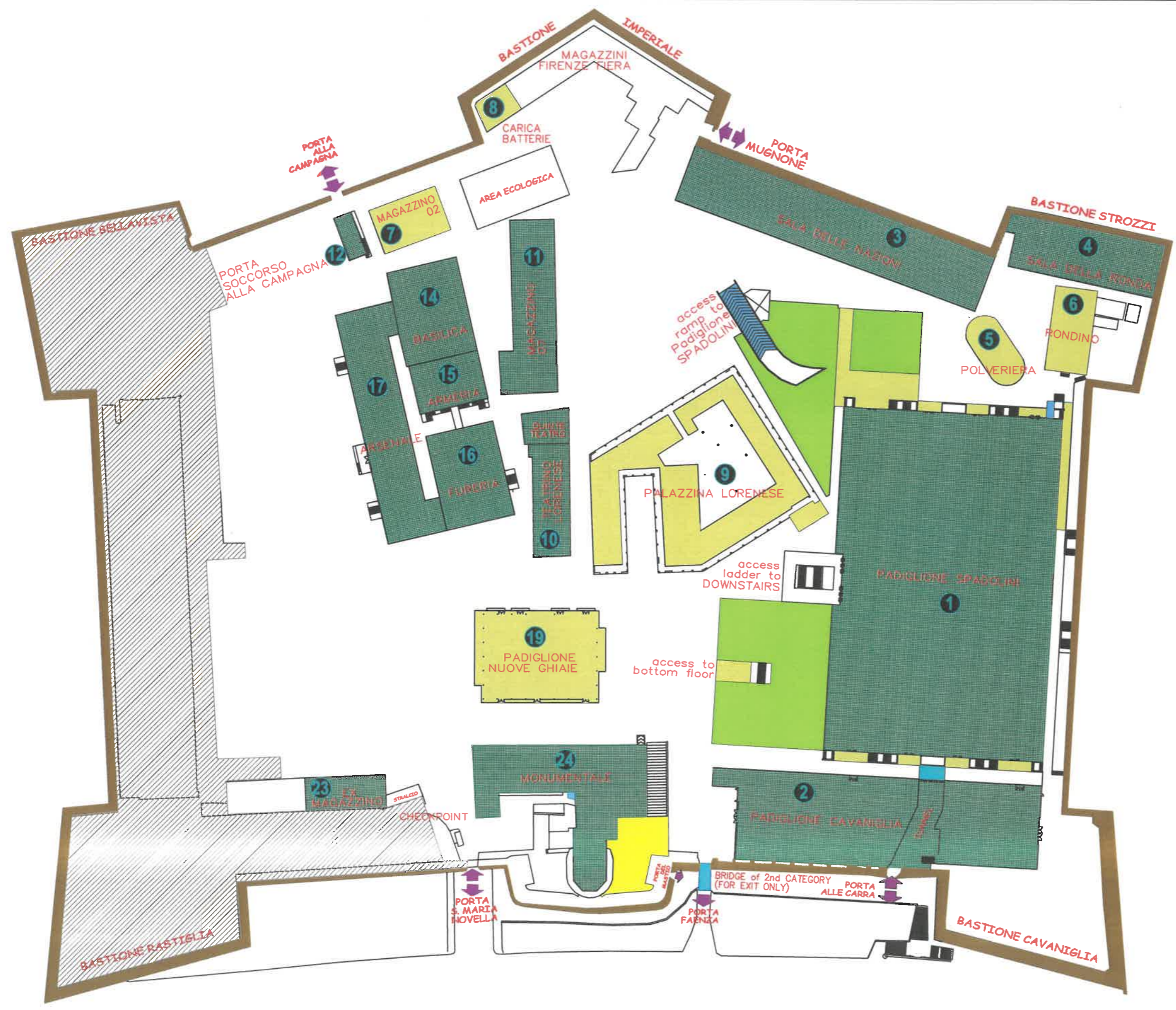
APPENDAGES
WALKABLE LIMIT




FORTEZZA DA BASSO FIRENZE














FORTEZZA DA BASSO
FIRENZE

FORTEZZA DA BASSO PLANIMETRY



ENGLISH VERSION
SCALE DRAWING: 1 : 1250



-  PERIMETER OF THE WALLS
-  PERIMETER NON-RELEVANT AREAS
-  PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
-  MAXIMUM FLOW RATES ALLOWED
- WALKABLE LIMIT:
-  3 kN/m² – 6.27 psf [USA]
-  4 kN/m² – 8.35 psf [USA]
-  4.5 kN/m² – 9.40 psf [USA]
-  5 kN/m² – 10.44 psf [USA]
-  15 kN/m² – 31.33 psf [USA]
-  20 kN/m² – 41.77 psf [USA]
-  MASSIVE FLOOR
-  ACCESSIBLE ONLY BY FOOT
-  DRIVEWAY

PURPOSE APPENDAGES AND WALKABLE LIMIT

The purpose of these tables is to indicate the maximum permissible capacities (loads) foreseeable for the appendices and to illustrate the procedures to be pursued in the preparations, including the limits of the trampling of environments managed by the *Firenze Fiera Company* at the *Fortezza da Basso*.

For this reason, for each individual pavilion, a summary diagram has been drawn up in each table, showing the limits and observations necessary for those who assemble the equipment in a concise and easy-to-read manner.

DEFINITIONS For a good understanding of the work, the tables report the symbologies provided by the recent provision issued by the *Ministero dell'Interno, Dipartimento VV.FF., Circ. 1 aprile 2011, n. 1689* - Public performance premises of temporary or permanent type; Verification of the solidity and safety of suspended loads date 01 APR 2011. The definitions are:

Suspended load any element (stage, furniture or other), placed in the air or held or anchored in suspension or supported at height or mechanically moved, before and/or during the show, by cranes, winches, bridge wagons, work platforms and similar. For the sake of clarity and for the sole purpose of this note, the most common types of suspended loads and their suspension systems (simple or complex) normally used in premises or public performance venues either, permanent or temporary, are identified below and are subject to the opinion of the Supervisory Board for the issue by the municipality of the licence referred to in Articles 68 e 80 del *TULPS*.

Fixed suspended load refers to a suspended load bound to one or more points of an upper or lower structure including ropes, tie-rods, chains and brackets; Load suspended from a lifting device: suspended load bound by a mobile element, be it rope, chain, belt and/or band, to a machine or to a complex lifting system.

Dynamic suspended load: suspended load constrained either by means of a device moved by a machine or by means of a complex lifting system capable of moving in space in one or more directions.

The following subdivision can be summarised:

SUPPORT STRUCTURE

constructive system to which loads area required to be anchored;

CONSTRAINT BETWEEN STRUCTURE AND MAIN LINK




hook / golfing / eyelet / etc.

MAIN CONNECTION

suspended load such as American beams, speakers, spotlights, projectors, etc.

In relation to suspended loads and fixed or temporary structures intended for anchoring them, reference was made to the provisions of the construction safety technical regulations *D.M. 17 GEN 2018* updating the standards *Norme tecniche per le costruzioni*; In addition, occupational health and safety technical rules were also considered applicable, the consolidated law on safety at work [T.U.S. Dlq 81/2008].

APPENDAGES According to the above-mentioned legislation, the Appendages are defined as a whole of the supporting structure, constrains, and the foreseeable load to be suspended; for a better readability, the tables have been grouped per environment to which standardised values have been assigned and represented as follows, for example:

APPENDAGES		SHARED LOAD ON THE SQUARE TRUSS	CONCENTRATED LOAD IN ONE POINT	WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Constructive system to which loads are required to be anchored	Constraints to be adopted	Equipment [qK = lb / ft]	Equipment QK = kN (lb)	
-1 BOTTOM FLOOR -1 GROUND FLOOR -1 PERVIOUS FLOOR ✓ LAMINATED WOODEN TRUSS - SQUARE TRUSS ANCHORAGES	✓ CORRESPONDENCE OFF THE KNOT	 0.25 kN/m ² (17 lb/ft ²)	 1.50 kN (337 lb)	1. All suspended loads must have the main hook or cable, in addition to the security one  2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)


Once the plan or level is defined, it is possible to identify the recurring typology of the constructive system to be used in order to adopt the type of constraint envisaged. The image clarifies that:

- All that is represented in **black/green** is competence of Firenze Fiera;
- All that is represented in **red** is instead competence of the fitter;

The same table also indicates the possible modes of attachment of loads depending on the needs of the fitter, together with, if provided, further instructions (also with explanatory sketches) of the actual permissible load conditions on the concerned structure.

Equal instructions are provided for the loading and overloading conditions of the floor surfaces (Walkable Limit) in relation to the environments, both external and internal that identify, the maximum limits provided in correspondence with the category of use of the environment as foreseen by the mentioned technical [UNI-EN] regulation.

For example:

WALKABLE LIMIT		UNIFORMLY DISTRIBUTED LOAD	VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK = kN/m ² (lb/ft ²)	square footprint	QK = kN (lb)	
C 1	3 kN/m ² (62.7 psf)	0.50 x 0.50 m.	3 kN (673 lb)	FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED 
C 2	5 kN/m ² (104.4 psf)		5 kN (1124 lb)	
C 3				
C				
F				
G				

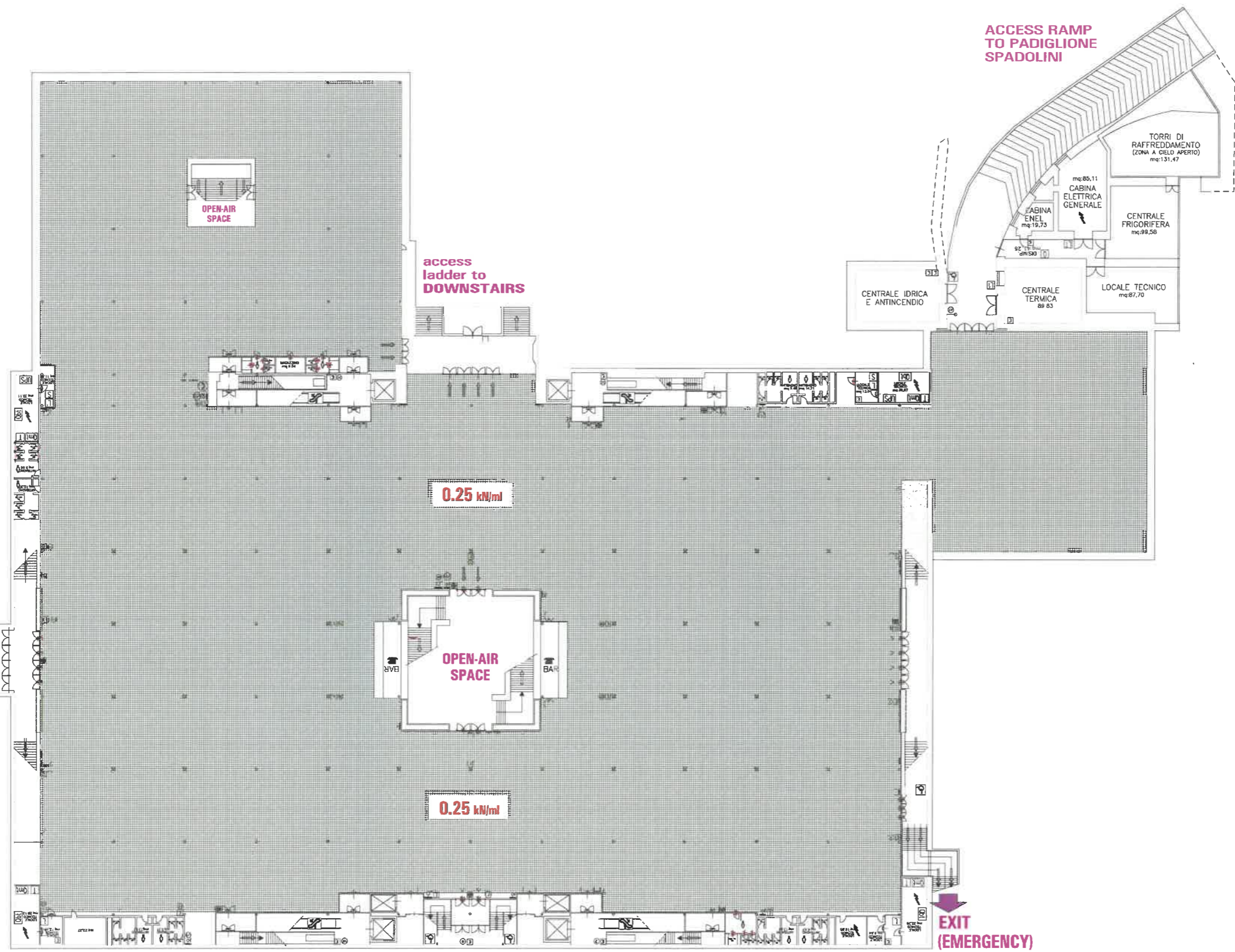
DOCUMENTATION The file attached clarifies how to safely set appendages and indicates suspension modes in relation to the permissible loads. It is specified :

- the type and consistency of suspended loads: see schemes of the systems provided for suspension/appendage as indicated in the aforementioned decrees;
- complex systems, where existing: for instance, support structures which are, themselves, hanged to "American - square truss".
- the regulations on the safety of workplaces in the case of stabilization of loads operated during the stages of preparation of the indicated environments.

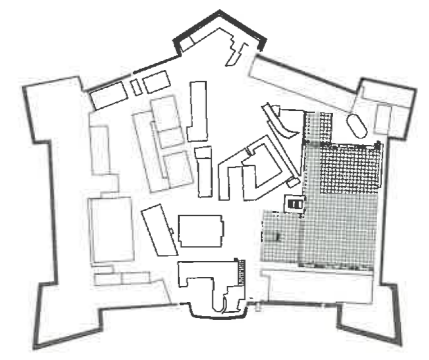
a
1
BOTTOM FLOOR
PADIGLIONE SPADOLINI

APPENDAGES

PADIGLIONE CANAVIGLIA
TUNNEL



NOTE : APPENDAGES TO THE FALSE CEILING ARE NOT ALLOWED



PERIMETER AREAS OF BUILDINGS

APPENDAGES:
MAXIMUM FLOW RATES ALLOWED
WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

- MASSIVE FLOOR
- ACCESSIBLE ONLY BY FOOT
- DRIVEWAY



ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored Constraints to be adopted

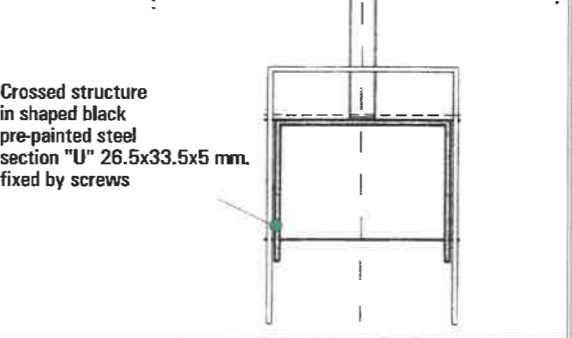
-1 BOTTOM FLOOR	<ul style="list-style-type: none"> ✓ CONNECTION TO THE CROSSED STRUCTURE ONLY: grid 1.20x1.20m ✓ SHAPED STEEL "U" SECTION, THICKNESS 5 mm. 	<ul style="list-style-type: none"> ✓ SHAPED BUTTONHOLE ✓ SLAVES METALLIC RING, CAP ✓ "S" HOOK
+1 PENTHOUSE GROUND FLOOR		
+1 PENTHOUSE FLOOR		

UNIFORM LOAD DISTRIBUTED		CONCENTRATED LOAD IN ONE POINT	
Equipment	qK = kN/ml [lb/ft]	Equipment	QK = kN [lb]
	0.25 kN/ml [17 lb/ft]		0.25 kN [55 lb]
kN/ml [lb/ft]		kN [lb]	
1.00 m [3.28 ft]			

WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS

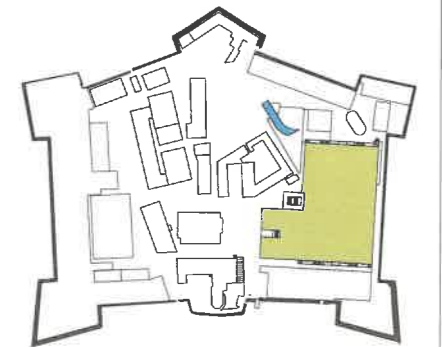
- All suspended loads must have the main hook or cable, in addition to the security one
- The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)

SKETCH



WALKABLE LIMIT

a
1
BOTTOM FLOOR
PADIGLIONE SPADOLINI



PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

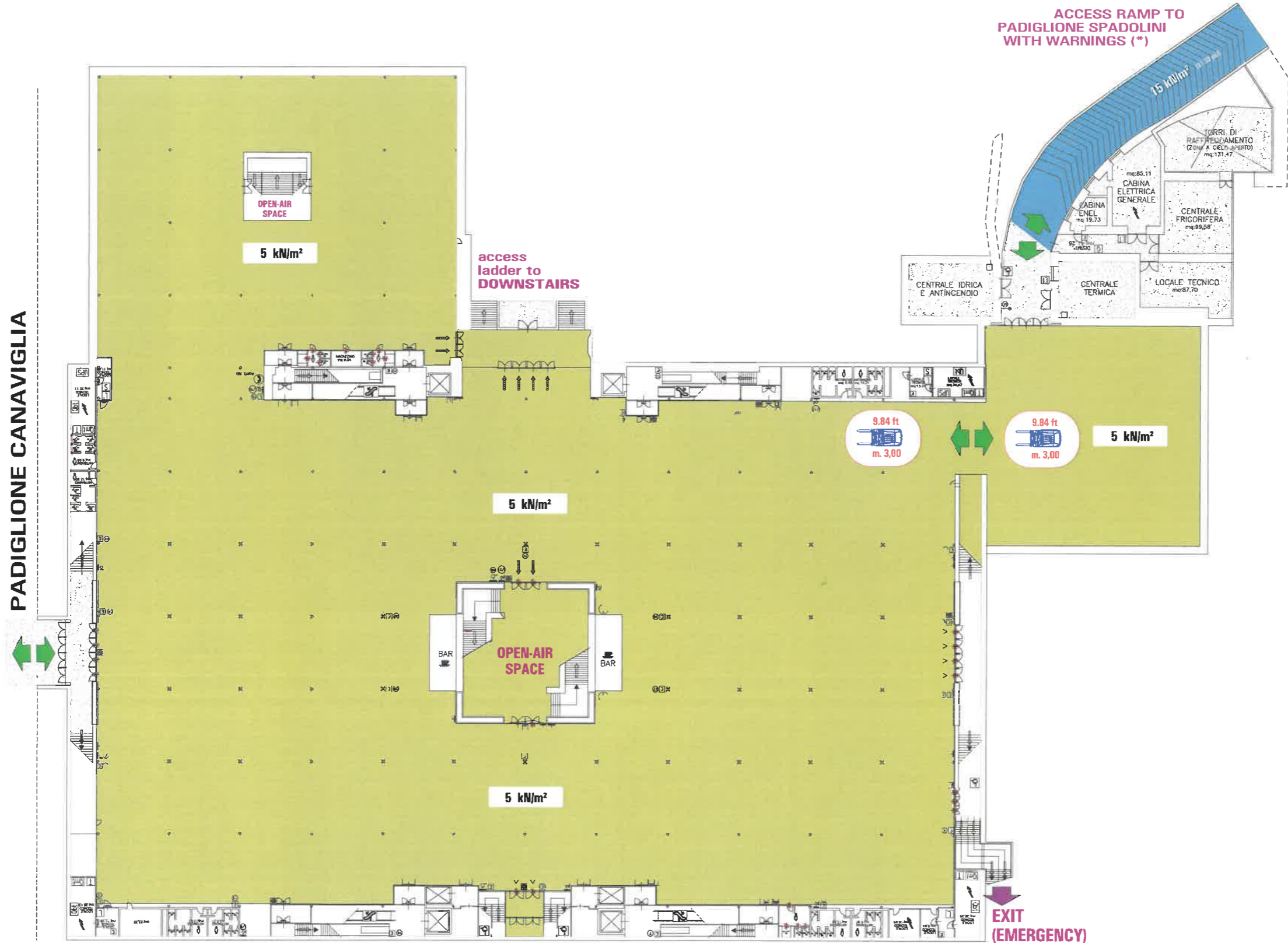
WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY



PADIGLIONE CANAVIGLIA

TUNNEL

EXIT (EMERGENCY)

ENGLISH VERSION
WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

- AREAS ZONE
- FLOORS
- ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
- ACCESS RAMP UNDERGROUND FLOOR FOR INTENSIVE TRANSIT - LOADING / UNLOADING DEPOT
- SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	
Category	qK = kN/m ² (lb/ft ²)	square footprint	QK = kN (tn)
C1			
C2			
C3	5 kN/m ² (10.44 psf)	0.50 x 0.50 m.	5 kN (0.50 tn)
C			
F	15 kN/m ² (31.33 psf)	1.00 x 1.00 m.	20 kN (2 tn)
G			

WARNINGS FOR ACCESS AND TRANSIT TO FORKLIFT AND TRUCKS TO PERFORM CORRECT MANEUVERS (*)

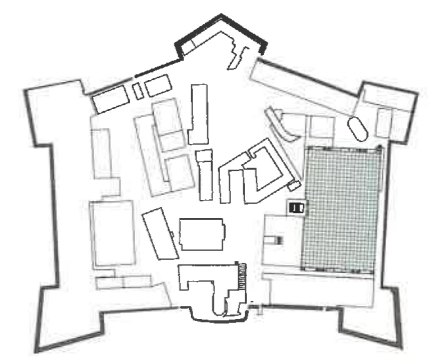


AI VEICOLI CON MOTORI A SCOPPIO
CARRELLI A MANO PENDEZZA DEL 15%

RIVOLGERSI AL SERVIZIO FACCHINAGGIO PREPOSTO PRESSO L'UFFICIO TECNICO

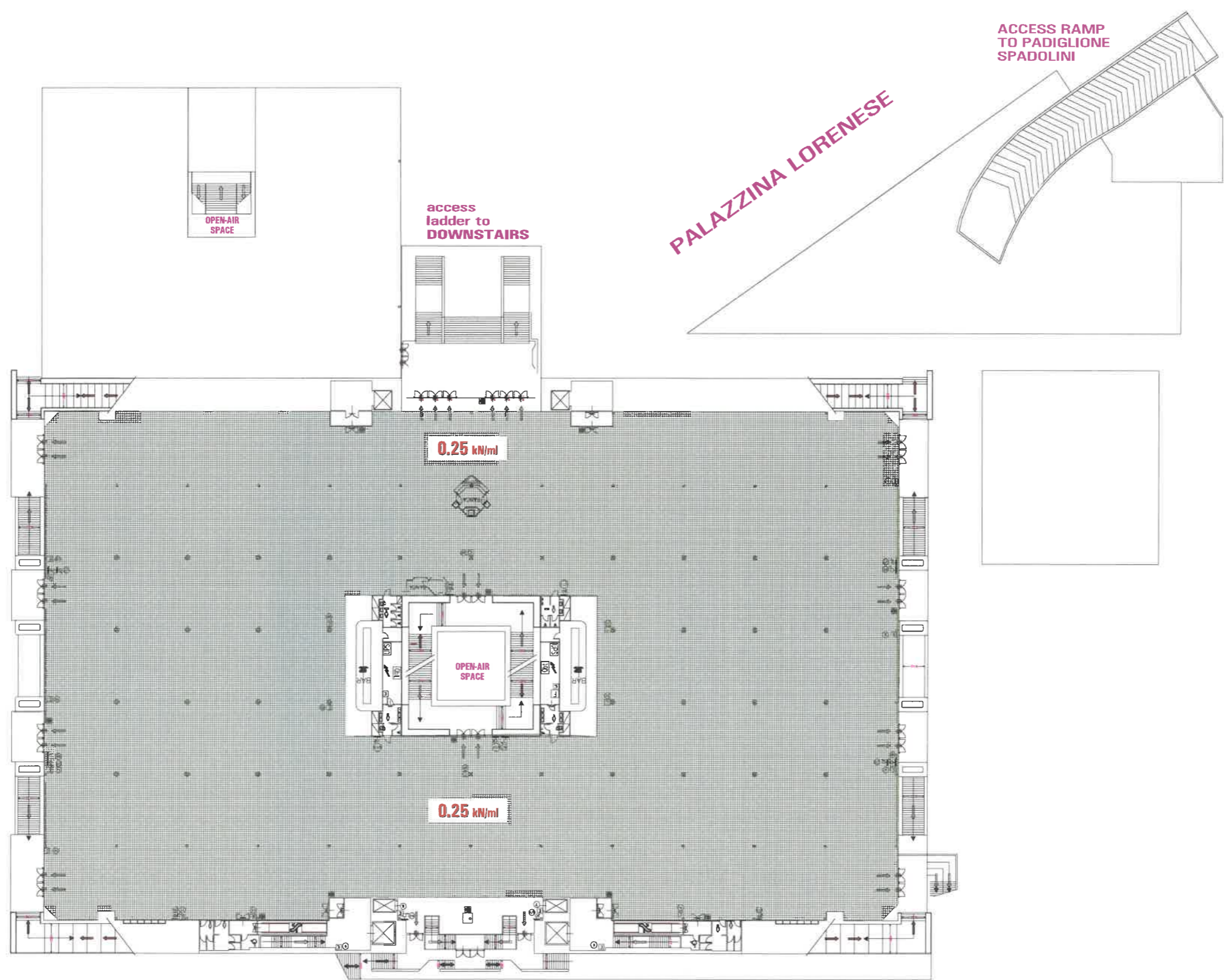
PRESCRIZIONI D'USO DEI CARRELLI ELEVATORI NEGLI SPAZI ESPOSITIVI:

- MAXIMUM GROSS WEIGHT by 2000 kg (4.41)
- MINIMUM DISTANCE BETWEEN VEHICLES m. 3,00 (9.84 ft)
- SPEED MAXIMUM VEHICLE AT MAN'S STEP



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
 - MAXIMUM FLOW RATES ALLOWED
 - WALKABLE LIMIT:
 - 3 kN/m² - 6.27 psf [USA]
 - 4 kN/m² - 8.35 psf [USA]
 - 4.5 kN/m² - 9.40 psf [USA]
 - 5 kN/m² - 10.44 psf [USA]
 - 15 kN/m² - 31.33 psf [USA]
 - 20 kN/m² - 41.77 psf [USA]
 - MASSIVE FLOOR
 - ACCESSIBLE ONLY BY FOOT
 - DRIVEWAY

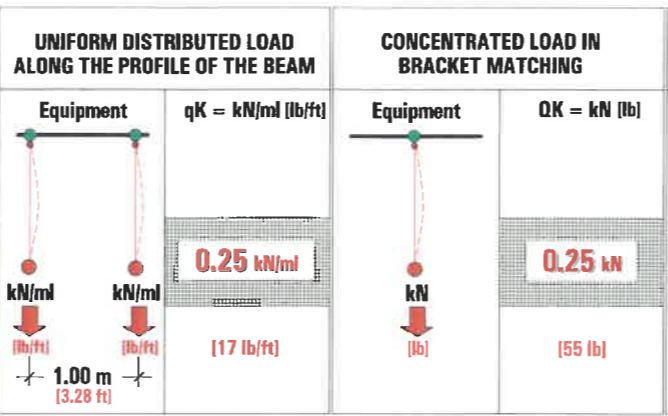
PADIGLIONE CANAVIGLIA



ENGLISH VERSION

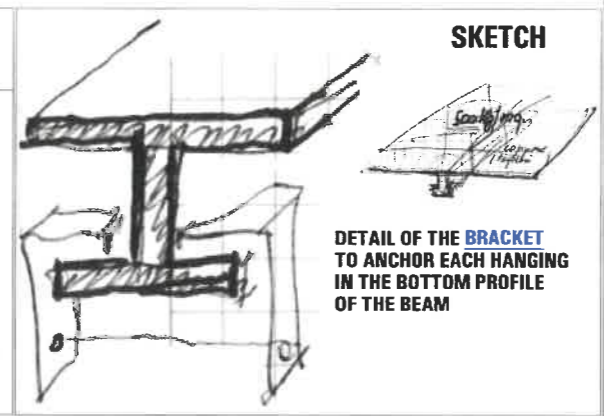
APPENDAGES

	Constructive system to which loads are required to be anchored	Constraints to be adopted
-1 BOTTOM FLOOR		
GROUND FLOOR	✓ STEEL LONGARINE AND REINFORCED CONCRETE PAIRS	✓ ONLY PREPARED BRACKET
+1 PENTHOUSE FLOOR		

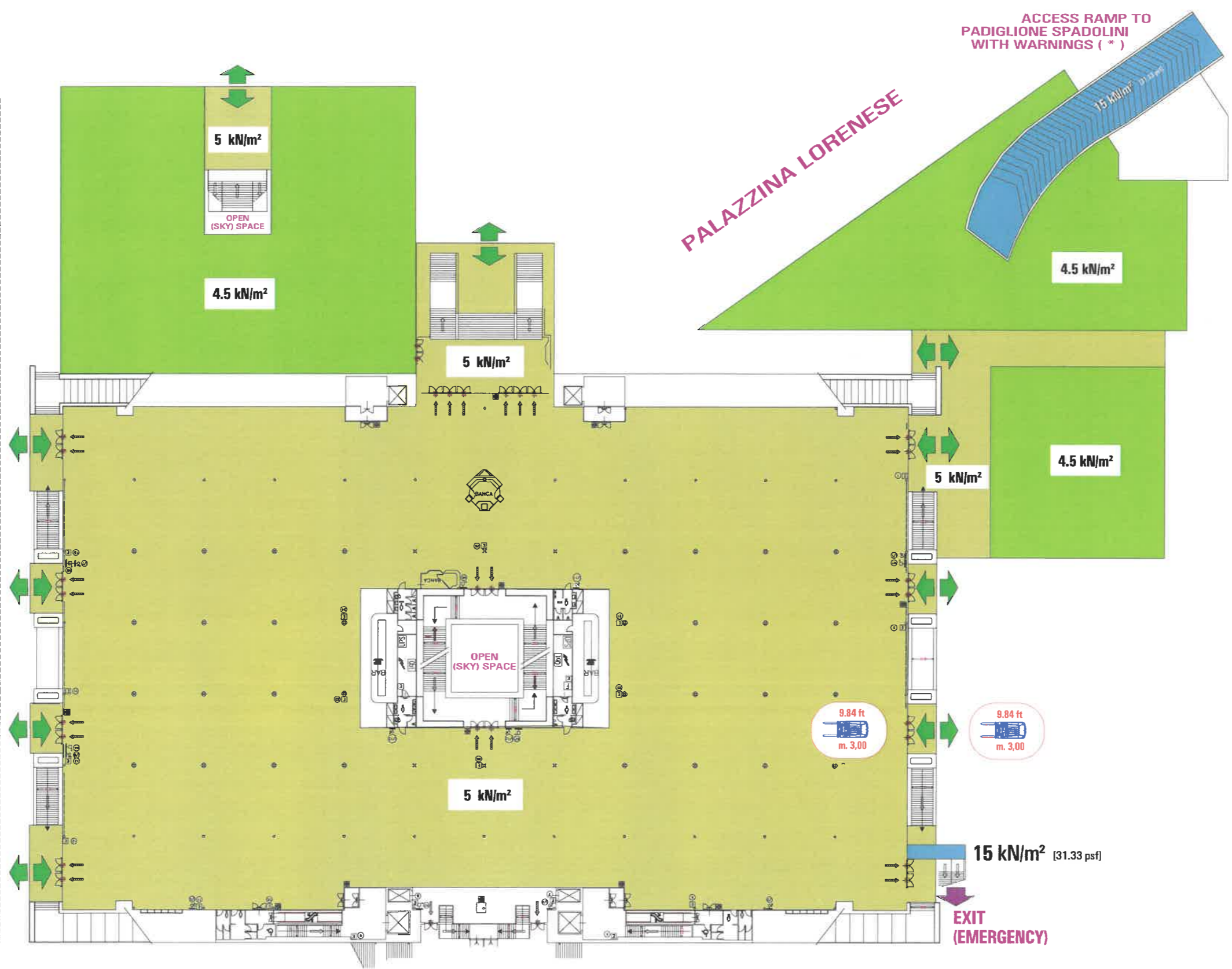


WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS

- All suspended loads must have the main hook or cable, in addition to the security one
- The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)



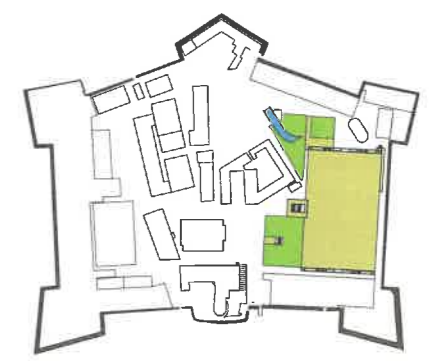
PADIGLIONE CANAVIGLIA



PALAZZINA LORENESE

b 1
GROUND FLOOR
PADIGLIONE SPADOLINI

WALKABLE LIMIT



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:**
- MAXIMUM FLOW RATES ALLOWED
- WALKABLE LIMIT:**
- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]
- MASSIVE FLOOR
- ➔ ACCESSIBLE ONLY BY FOOT
- ➔ DRIVEWAY

ENGLISH VERSION

WALKABLE LIMIT

- Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II
- AREAS
 - FLOORS
 - SLAB
 - TUNNEL
 - ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
 - COMMON ENVIRONMENTS, TERRACES AND SPACES ACCORDING TO THE CATEGORY (> 4.00 kN)
 - ACCESS RAMP UNDERGROUND FLOOR FOR INTENSIVE TRANSIT - LOADING / UNLOADING DEPOT

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	
Category	qK=kN/m ² [lb/ft ²]	square footprint	QK = kN [tn]
C 1			
C 2			
C 3	5 kN/m ² [10.44 psf]	0.50 x 0.50 m.	5 kN [0.50 tn]
C	4.5 kN/m ² [9.40 psf]		4.50 kN [0.46 tn]
F	15 kN/m ² [31.33 psf]	1.00 x 1.00 m.	20 kN [2.04 tn]
G			

WARNINGS FOR ACCESS AND TRANSIT TO FORKLIFT AND TRUCKS TO PERFORM CORRECT MANEUVERS (*)

FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED

- In relation to the capacities of the floor, the access of telescopic handlers and other means (forklifts) is allowed only with payloads of 7 kN (1550 lb) so that total weight is < 3.8 tn (own weight 30.5 tn)
- If there is more than one forklift truck inside the Pavilion it is mandatory to respect the mutual safety distance between the means of at 3.00 m. (10 ft)

PRESCRIZIONI D'USO DEI CARRELLI ELEVATORI NEGLI SPAZI ESPOSITIVI

1

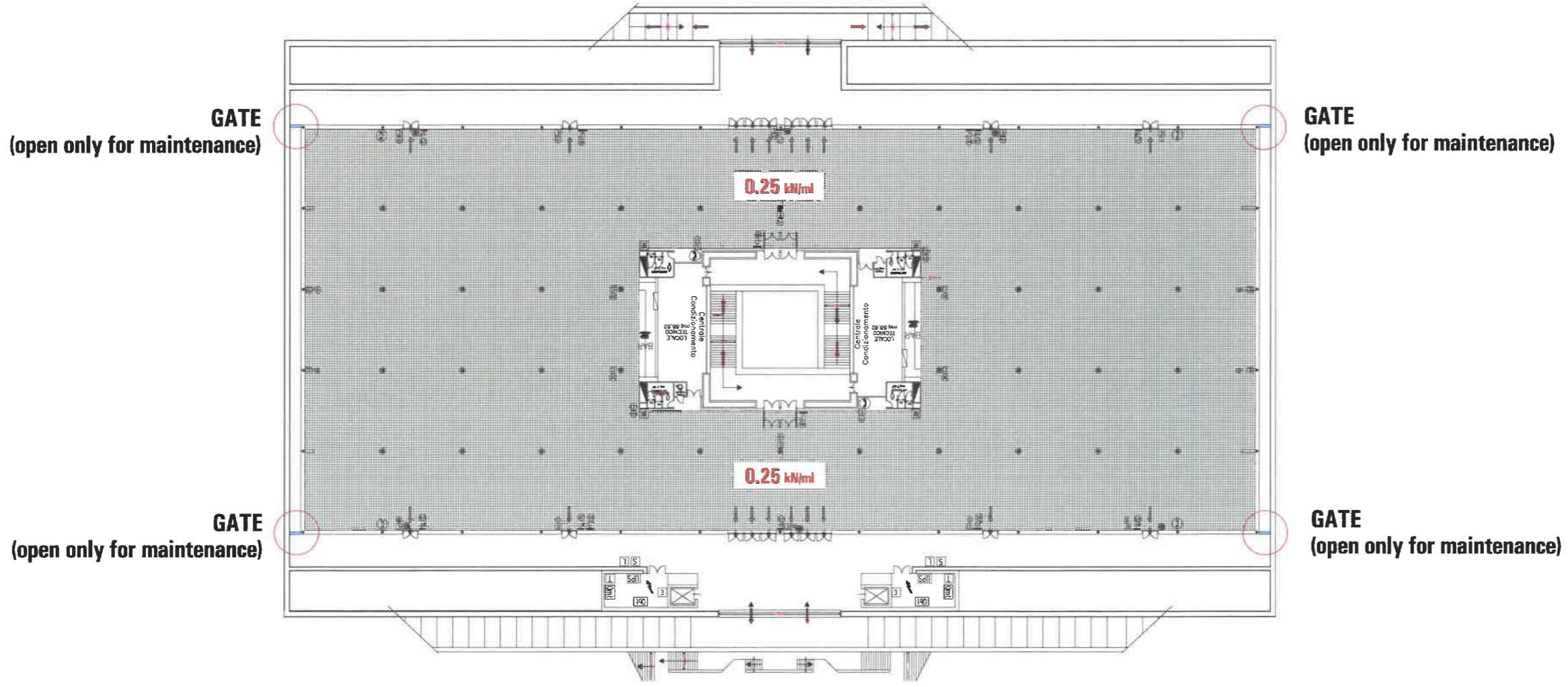
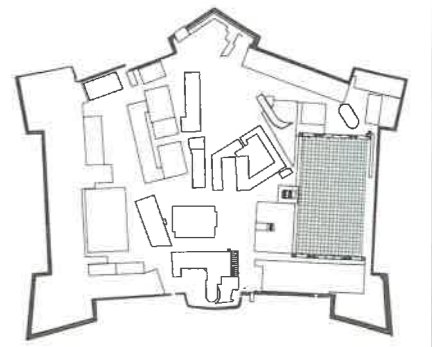
MAXIMUM GROSS WEIGHT
kg 3800
lb 8.37

2

MINIMUM DISTANCE BETWEEN VEHICLES
m. 3,00
9.84 ft

3

SPEED
MAXIMUM VEHICLE AT MAN'S STEP



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
 - MAXIMUM FLOW RATES ALLOWED
 - WALKABLE LIMIT:
 - 3 kN/m² - 6.27 psf [USA]
 - 4 kN/m² - 8.35 psf [USA]
 - 4.5 kN/m² - 9.40 psf [USA]
 - 5 kN/m² - 10.44 psf [USA]
 - 15 kN/m² - 31.33 psf [USA]
 - 20 kN/m² - 41.77 psf [USA]
 - MASSIVE FLOOR
 - ACCESSIBLE ONLY BY FOOT
 - DRIVEWAY



ENGLISH VERSION

APPENDAGES

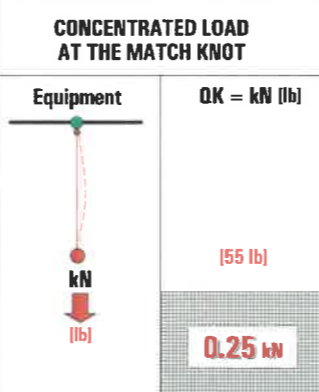
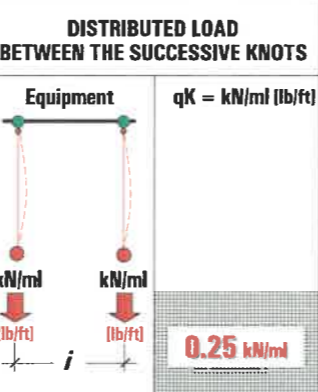
Constructive system to which loads are required to be anchored

Constraints to be adopted

-1 PENTHOUSE BOTTOM FLOOR	<input type="checkbox"/>
0 PENTHOUSE GROUND FLOOR	<input type="checkbox"/>
+1 PENTHOUSE FLOOR	<input checked="" type="checkbox"/>

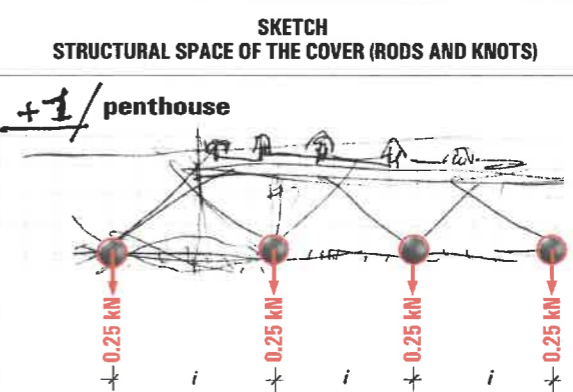
SPATIAL STRUCTURE CONSISTING WITH BAR AND KNOTS

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/> CORRESPONDENCE OF THE KNOT



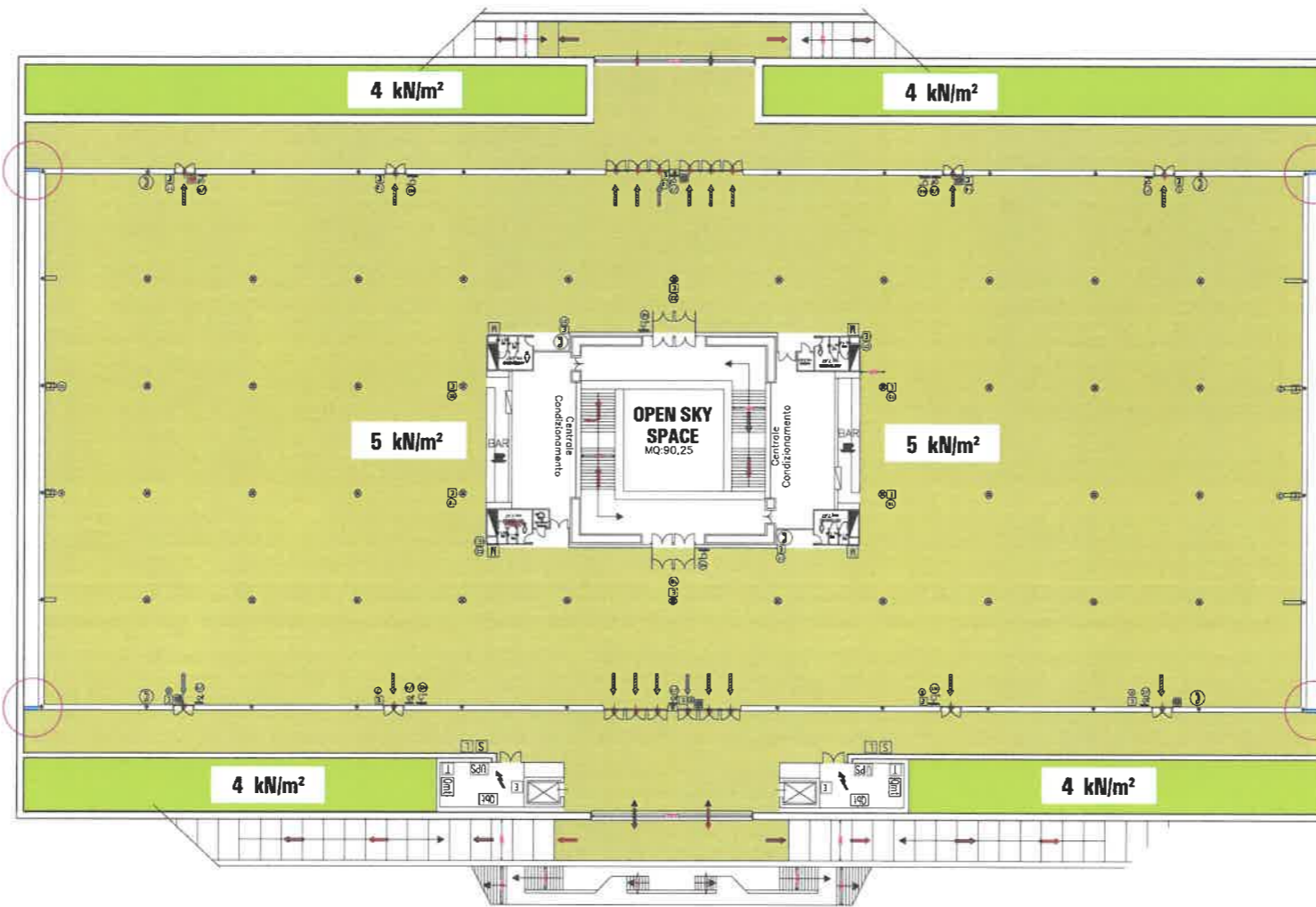
WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS

- All suspended loads must have the main hook or cable, in addition to the security one
- The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)



1st FLOOR - PENTHOUSE
PADIGLIONE SPADOLINI

WALKABLE LIMIT

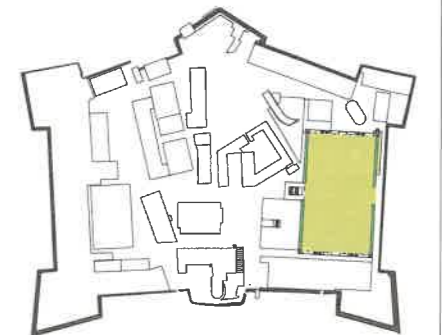


GATE
(open only for maintenance)

GATE
(open only for maintenance)

GATE
(open only for maintenance)

GATE
(open only for maintenance)



PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY

WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	<input checked="" type="checkbox"/>	FIXED SEATING AREAS SUCH AS CONFERENCE HALLS FOR PUBLIC USE
FLOORS	<input checked="" type="checkbox"/>	ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMPS	<input type="checkbox"/>	
SLAB	<input type="checkbox"/>	
TUNNEL	<input type="checkbox"/>	

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	
Category	qK = kN/m ² (lb/ft ²)	square footprint	QK = kN (tn)
C 1		0.50 x 0.50 m.	4 kN (0.4 tn)
C 2	4 kN/m ² (10.35 psf)		
C 3	5 kN/m ² (10.44 psf)		
C			
F			
G			
-			

1st FLOOR - PENTHOUSE

GROUND FLOOR



APPENDAGES ARE NOT ALLOWED TO THE FALSE CEILINGS

APPENDAGES ARE NOT ALLOWED TO THE FALSE CEILINGS

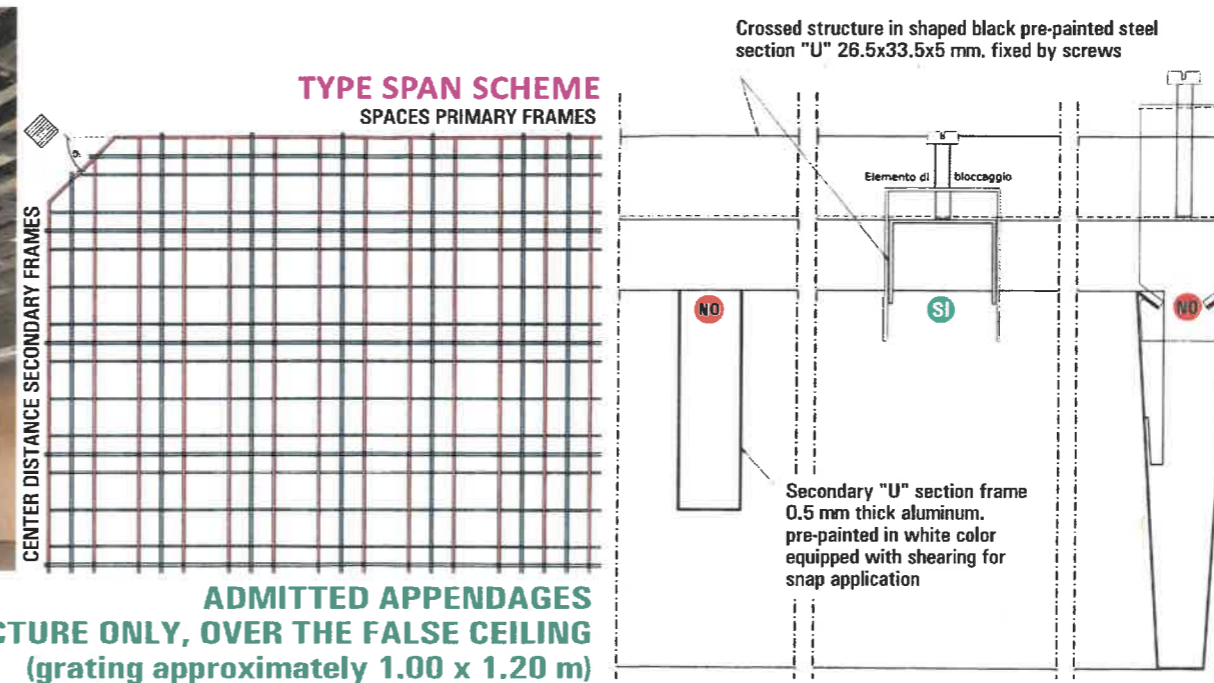
FALSE CEILINGS

1st FLOOR - PENTHOUSE
 GROUND FLOOR
 BOTTOM FLOOR
 PADIGLIONE SPADOLINI

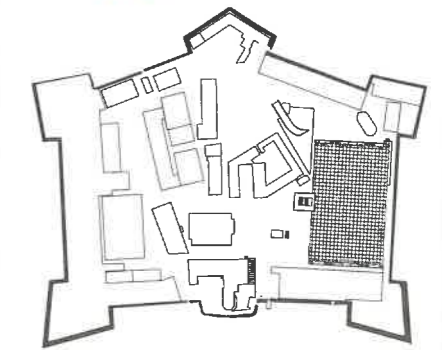
d 1

DOWNSTAIRS - BOTTOM FLOOR

APPENDAGES ARE NOT ALLOWED TO THE FALSE CEILINGS

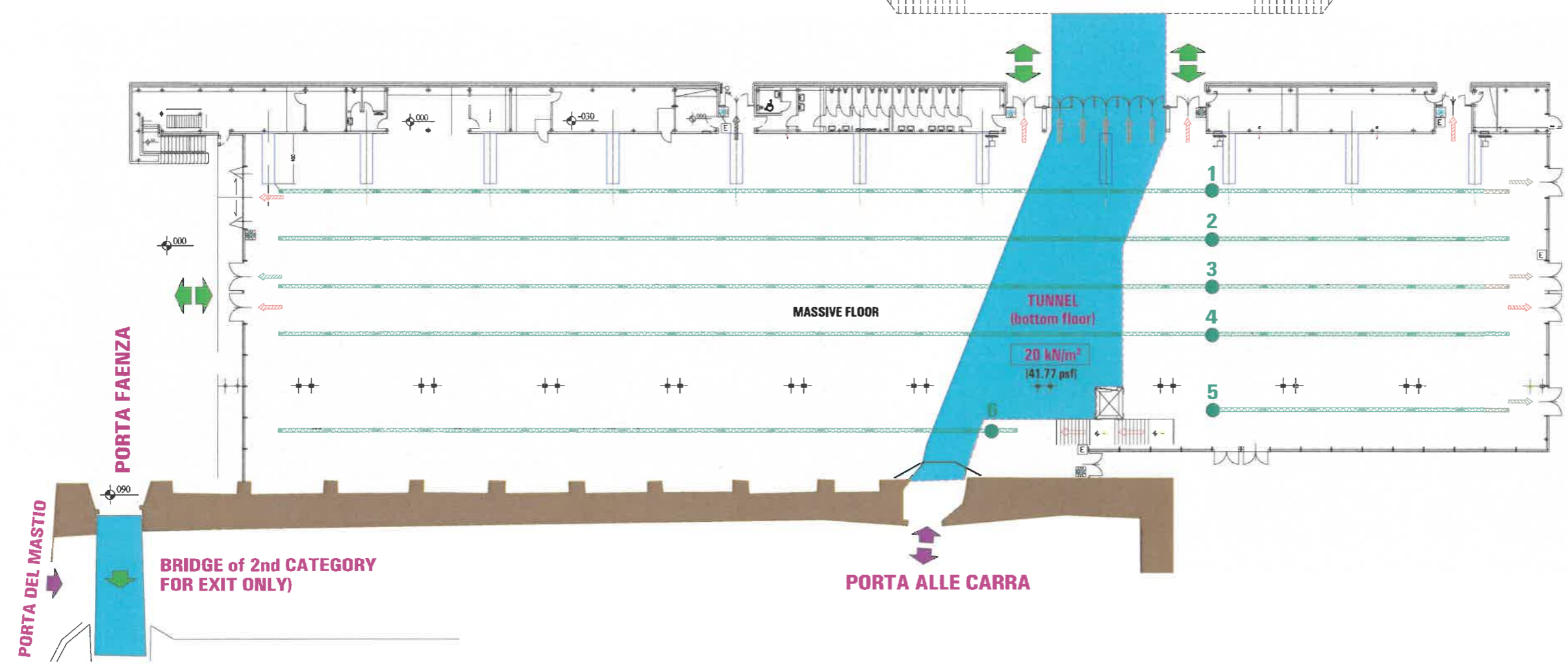


ADMITTED APPENDAGES TO CROSSED STRUCTURE ONLY, OVER THE FALSE CEILING (grating approximately 1.00 x 1.20 m)



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
 - MAXIMUM FLOW RATES ALLOWED
 - WALKABLE LIMIT:
 - 3 kN/m² - 6.27 psf [USA]
 - 4 kN/m² - 8.35 psf [USA]
 - 4.5 kN/m² - 9.40 psf [USA]
 - 5 kN/m² - 10.44 psf [USA]
 - 15 kN/m² - 31.33 psf [USA]
 - 20 kN/m² - 41.77 psf [USA]
 - MASSIVE FLOOR
 - ACCESSIBLE ONLY BY FOOT
 - DRIVEWAY

ENTRANCE FROM THE LOWER FLOOR OF THE PADIGLIONE SPADOLINI



ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored	Constraints to be adopted
<input type="checkbox"/> BOTTOM FLOOR <input type="checkbox"/> GROUND FLOOR <input checked="" type="checkbox"/> LAMINATED WOODEN TRUSS - SQUARE TRUSS ANCHORAGES <input type="checkbox"/> PENTHOUSE FLOOR	<input type="checkbox"/> <input checked="" type="checkbox"/> TO THE SQUARE TRUSS <input type="checkbox"/> <input type="checkbox"/>

WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

Category	qK = kN/m² (lb/ft²)	square footprint	QK = kN (tn)
C 1			
C 2			
C 3			
C			
F			
G	20 kN/m² (41.77 psf)	2.00 x 2.00 m.	20 kN (10 tn)

ACCESS AND STORAGE AREAS FOR GOODS, WAREHOUSES AND DEPOSITS
 SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR

SHARED LOAD ON THE SQUARE TRUSS		CONCENTRATED LOAD IN THE KNOT	
Equipment	[qK = lb / ft]	Equipment	[QK = lb]
 kN/ml (lb/ft)	0.32 kN/ml (21.5 lb/ft)	 kN (lb)	0.32 kN (72 lb)

WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS

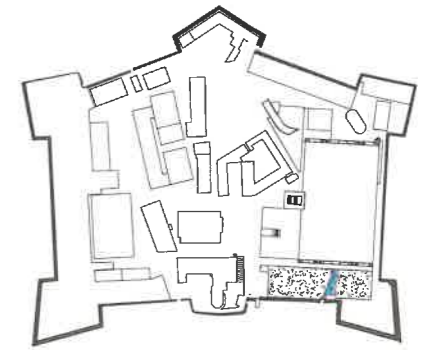
- All suspended loads must have the main hook or cable, in addition to the security one
- The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)

DETAIL OF THE SQUARE TRUSS " (to which the loads are to be anchored)

example of double safety steel wire 5 mm. [safety](#)

HD34 SQUARE TRUSS
 - Increased wall thickness for main tubes of 3mm
 - Increased loading compared to FD34 (up to 50%)
 - Also available as HD34 Tower Truss
 - TÜV approved

FD34 SQUARE TRUSS
 - Tolerance free conical connector
 - Wall thickness for main tubes of 2mm
 - Also available in any non-standard length and shape
 - TÜV approved



PERIMETER AREAS OF BUILDINGS

APPENDAGES:

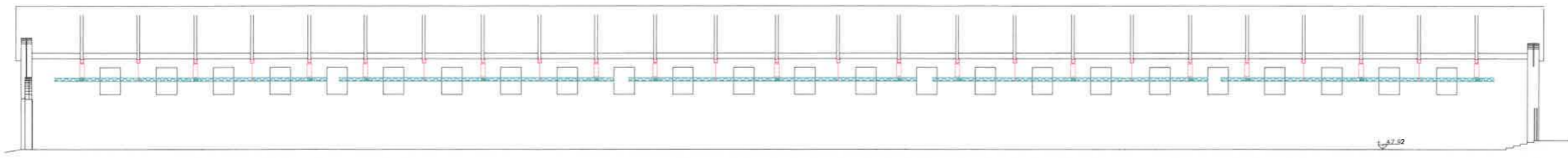
MAXIMUM FLOW RATES ALLOWED WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

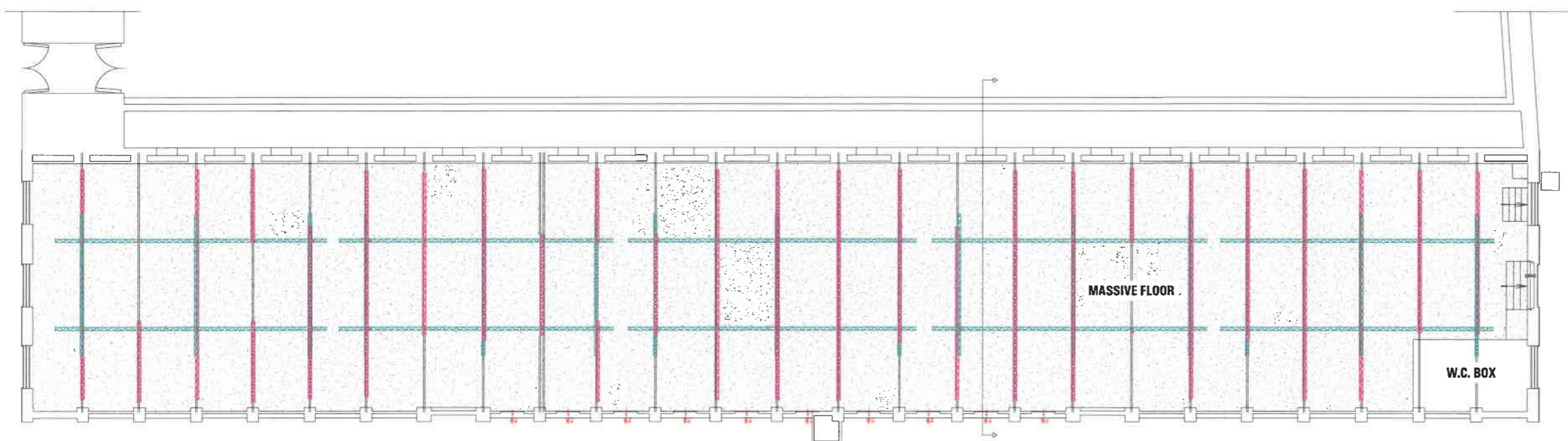
MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

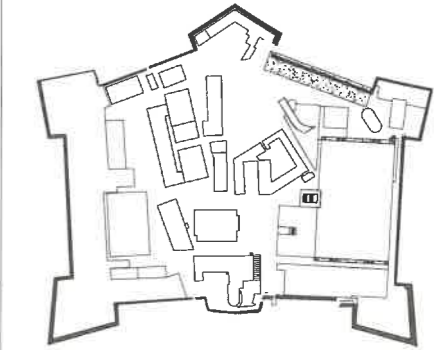
DRIVEWAY



LONGITUDINAL SECTION



GROUND FLOOR

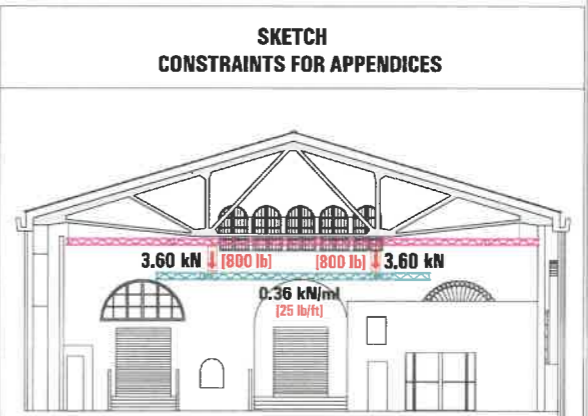


ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored	Constraints to be adopted
<input type="checkbox"/> -1 BOTTOM FLOOR <input checked="" type="checkbox"/> PENTHOUSE GROUND FLOOR <input type="checkbox"/> +1 PENTHOUSE FLOOR	<input type="checkbox"/> <input checked="" type="checkbox"/> REINFORCED CONCRETE TRUSSES - SQUARE TRUSS ANCHORAGES <input checked="" type="checkbox"/> TO THE LOAD-BEARING TRUSS <input checked="" type="checkbox"/> TO THE SQUARE TRUSS "EDISON"

SHARED LOAD ON THE SQUARE TRUSS	CONCENTRATED LOAD IN ONE POINT	WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
<p>Equipment</p> <p>SQUARE TRUSS</p> <p>qK = lb / ft</p> <p>0.36 kN/ml</p> <p>[25 lb/ft]</p>	<p>Equipment</p> <p>[QK = lb]</p> <p>ONLY n. 2 attacks for each truss</p> <p>3.60 kN</p> <p>[800 lb]</p>	<p>1. All suspended loads must have the main hook or cable, in addition to the <u>security</u> one</p> <p>2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)</p>



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
 - MAXIMUM FLOW RATES ALLOWED
- WALKABLE LIMIT:
 - 3 kN/m² - 6.27 psf [USA]
 - 4 kN/m² - 8.35 psf [USA]
 - 4.5 kN/m² - 9.40 psf [USA]
 - 5 kN/m² - 10.44 psf [USA]
 - 15 kN/m² - 31.33 psf [USA]
 - 20 kN/m² - 41.77 psf [USA]
- MASSIVE FLOOR
- ACCESSIBLE ONLY BY FOOT
- DRIVEWAY

WALKABLE LIMIT

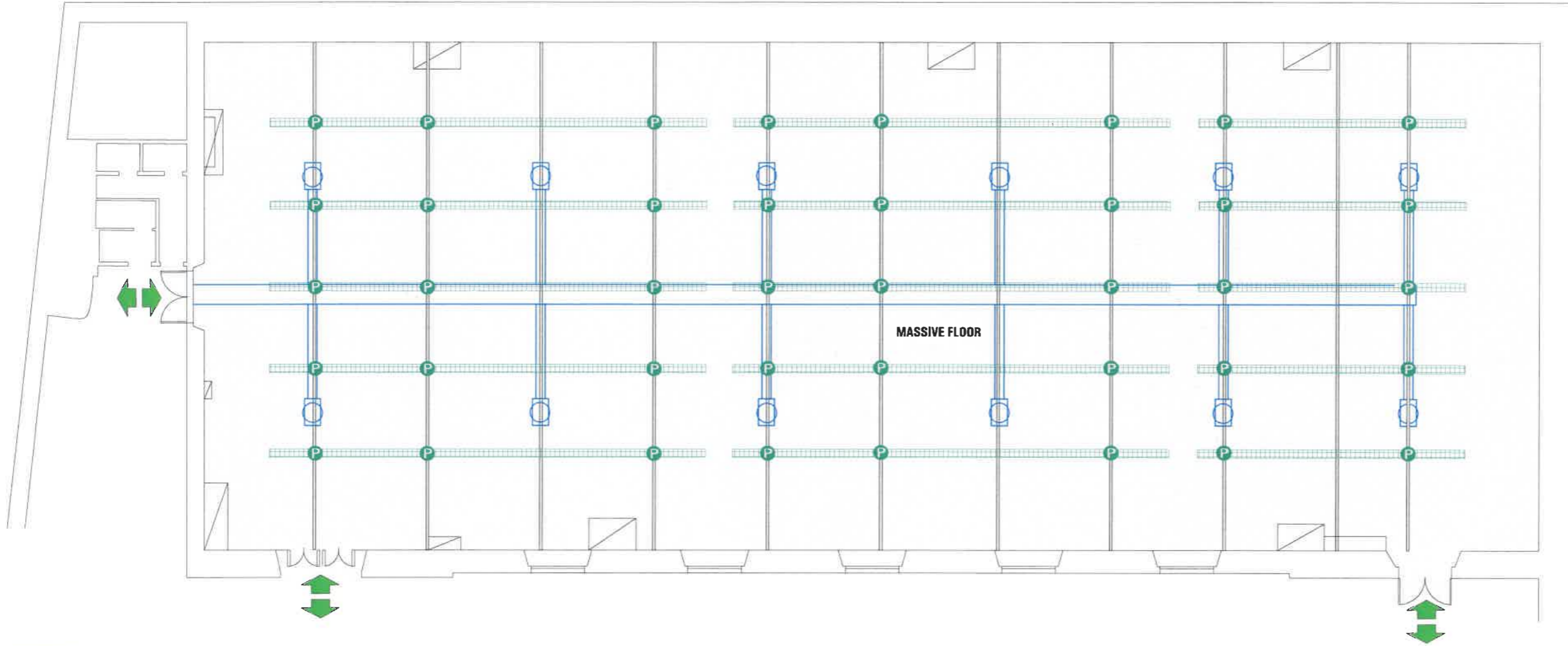
Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

Category	qK = kN/m ² [lb/ft ²]
C 1	
C 2	
C 3	
C	
F	
G	
-	

AREAS
 FLOORS
 ZONE
 SLAB
 TUNNEL
 SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR

UNIFORMLY DISTRIBUTED LOAD	VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	square footprint	QK = kN (m)
C 1		
C 2		
C 3		
C		
F		
G		
-		

FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED



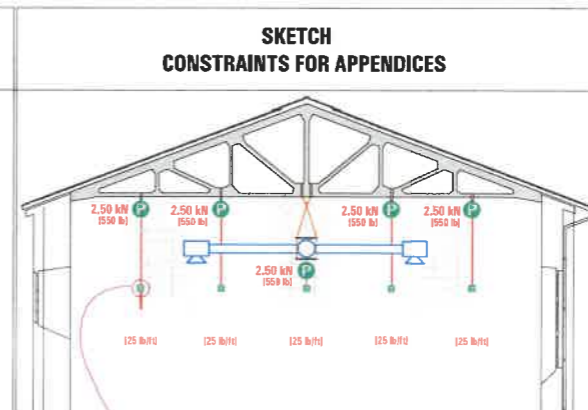
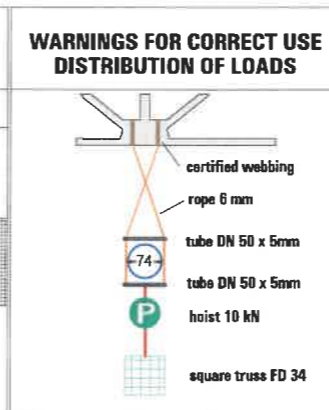
ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored Constraints to be adopted

-1 BOTTOM FLOOR		
GROUND FLOOR	REINFORCED CONCRETE TRUSSES - SQUARE TRUSS ANCHORAGES	n. 4 SQUARE TRUSS ONLY
+1 PENTHOUSE FLOOR		

SHARED LOAD ON THE SQUARE TRUSS		CONCENTRATED LOAD-ONE POINT	
Equipment	[qK = lb / ft]	Equipment	QK = kN [lb]
SQUARE TRUSS	0.36 kN/ml [25 lb/ft]	SQUARE TRUSS	2.50 kN [550 lb]
	1.00 m [3.28 ft]		



PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

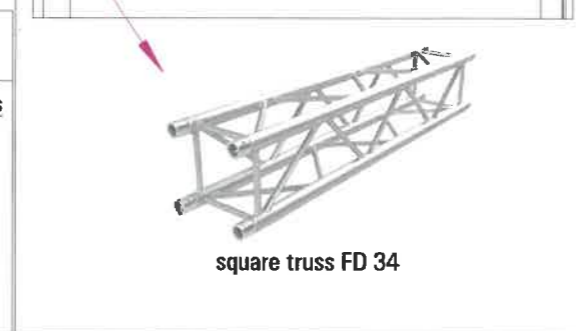
DRIVEWAY

WALKABLE LIMIT

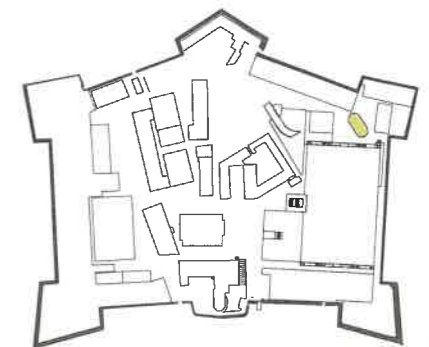
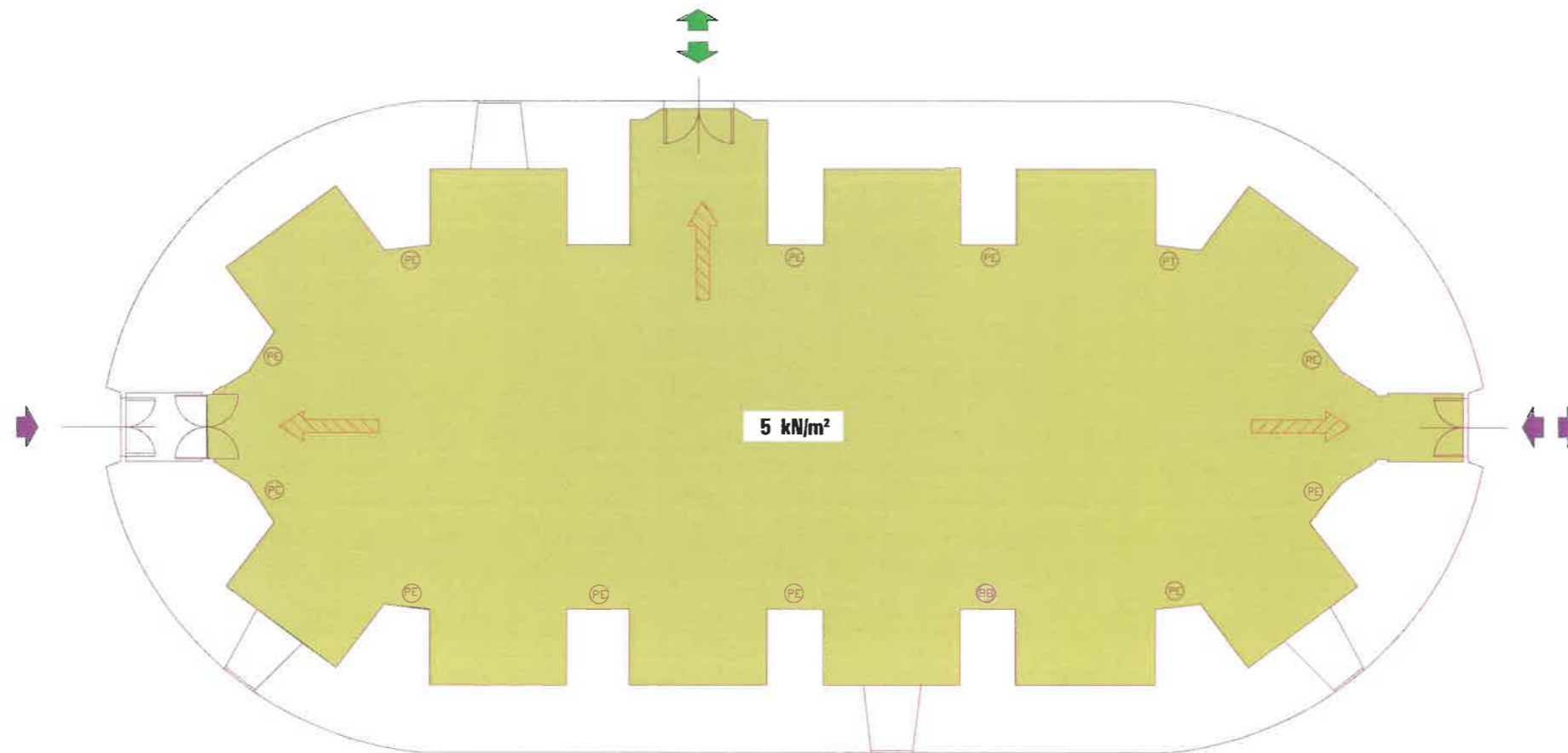
Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS	
SLAB FLOORS	
TUNNEL	
RAMPS	
SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR	

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	
Category	qK=kN/m ² [lb/ft ²]	square footprint	QK = kN
C 1			
C 2			
C 3			
F / G			
E 1			
E 1			
E 2			



PIAZZALE NORD-OVEST



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
 - MAXIMUM FLOW RATES ALLOWED
 - WALKABLE LIMIT:
 - 3 kN/m² - 6.27 psf [USA]
 - 4 kN/m² - 8.35 psf [USA]
 - 4.5 kN/m² - 9.40 psf [USA]
 - 5 kN/m² - 10.44 psf [USA]
 - 15 kN/m² - 31.33 psf [USA]
 - 20 kN/m² - 41.77 psf [USA]
 - MASSIVE FLOOR
 - ACCESSIBLE ONLY BY FOOT
 - DRIVEWAY

ENGLISH VERSION

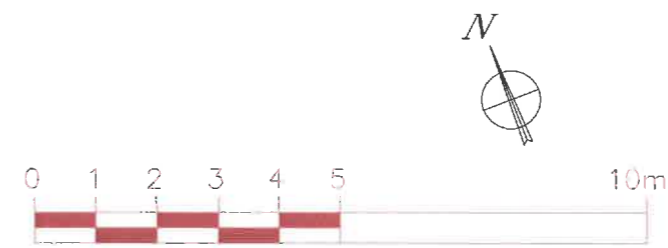
APPENDAGES
NO APPENDAGES IS ALLOWED

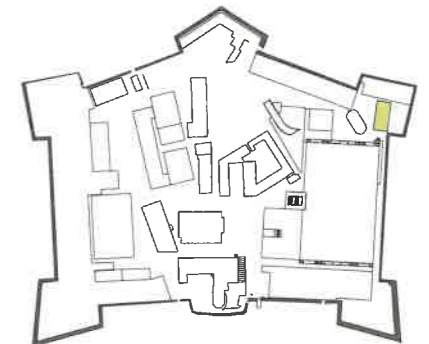
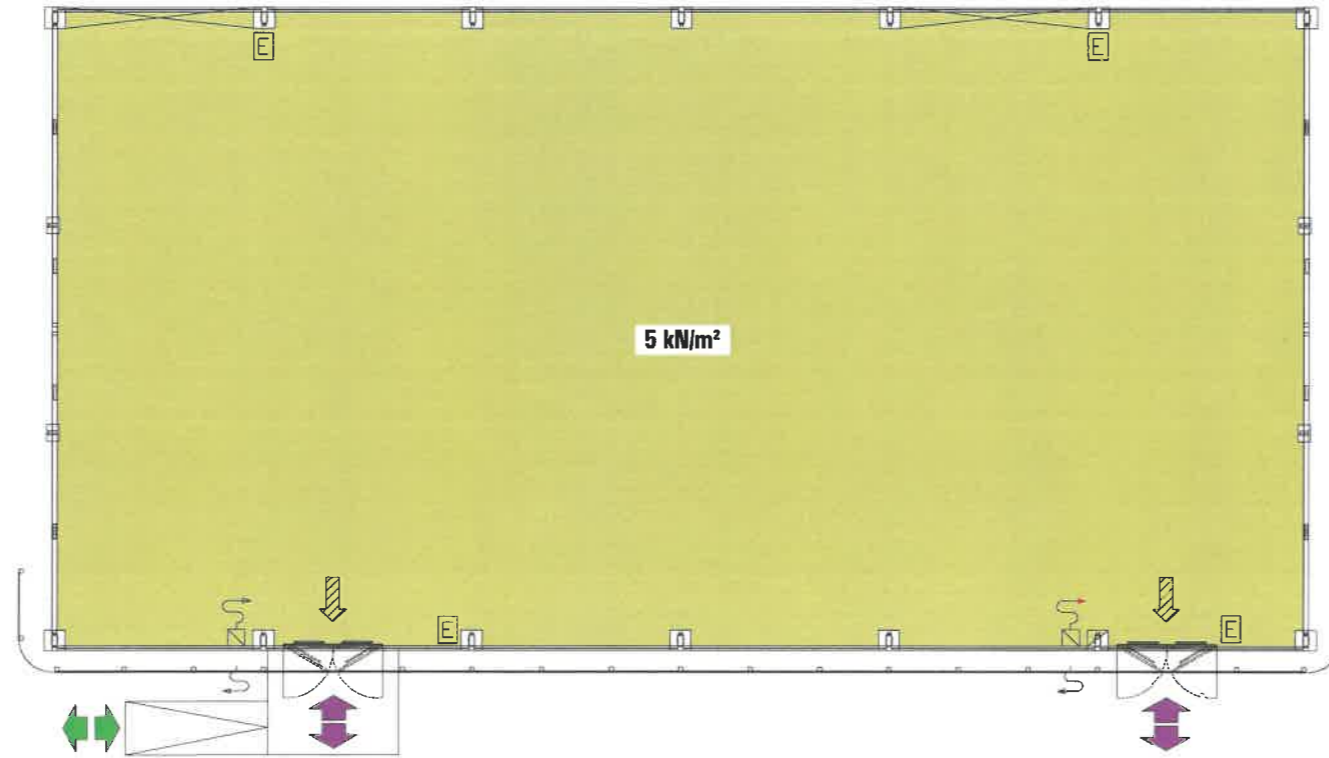
WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	<input type="checkbox"/>
FLOORS	<input checked="" type="checkbox"/>
ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS	<input checked="" type="checkbox"/>
RAMP	<input type="checkbox"/>
SLAB	<input type="checkbox"/>
TUNNEL	<input type="checkbox"/>
SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR	<input checked="" type="checkbox"/>

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK=kN/m ² (lb/ft ²)	square footprint	QK = kN (tn)	FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
C 1				
C 2				
C 3	5 kN/m ² (10.44 psf)	0.50 x 0.50 m.	5.00 kN (0.50 tn)	
C				
F				
G				
-				





PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

WALKABLE LIMIT:

3 kN/m² - 6.27 psf [USA]

4 kN/m² - 8.35 psf [USA]

4.5 kN/m² - 9.40 psf [USA]

5 kN/m² - 10.44 psf [USA]

15 kN/m² - 31.33 psf [USA]

20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY



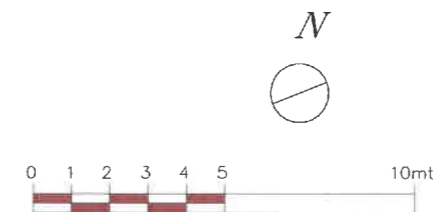
APPENDAGES
CHECK OUT FROM TIME TO TIME

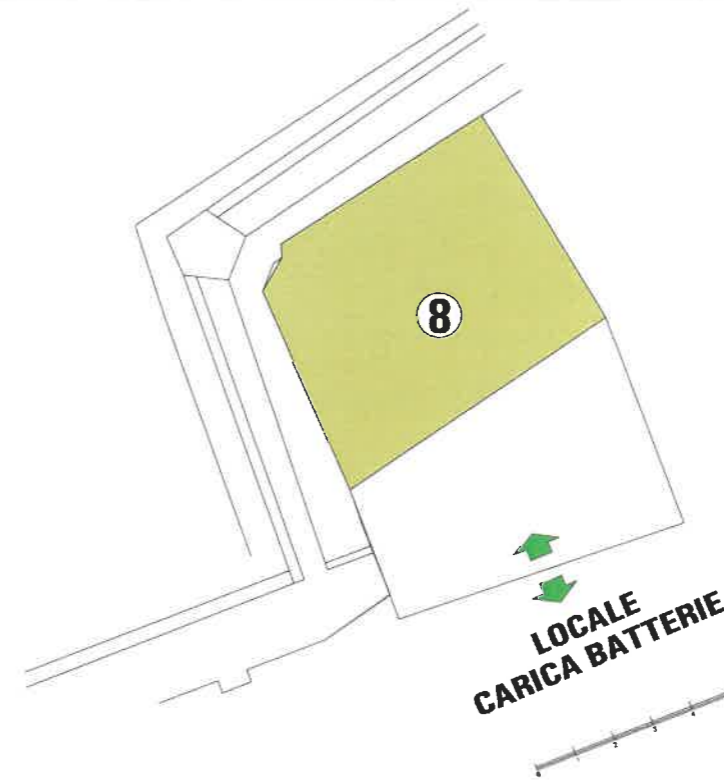
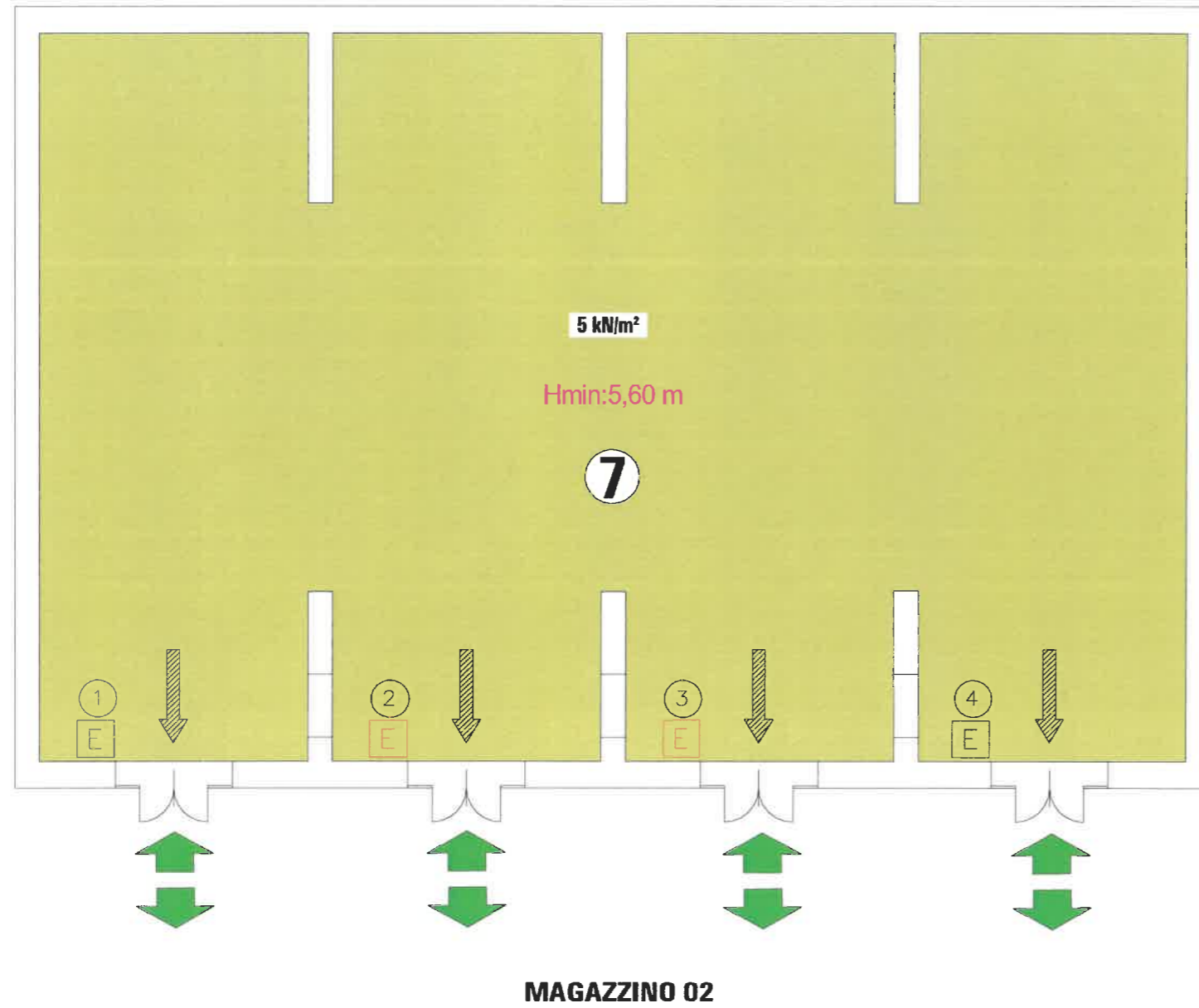
WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

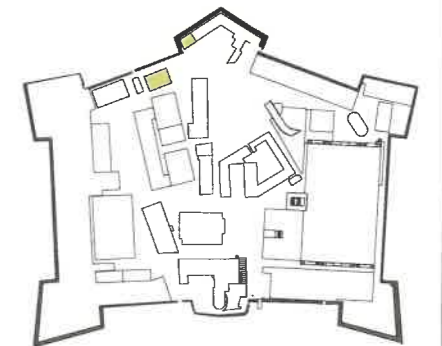
AREAS ZONE	<input type="checkbox"/>
FLOORS	<input checked="" type="checkbox"/>
SLAB	<input type="checkbox"/>
TUNNEL	<input type="checkbox"/>
RAMPS	<input type="checkbox"/>
ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS	
SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR	

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK=kN/m ² (lb/ft ²)	square footprint	QK = kN (tn)	FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
C 1				
C 2				
C 3	5 kN/m ² (10.44 psf)	0.50 x 0.50 m.	5.00 kN (0.50 tn)	
C				
F				
G				
-				





7 8
MAGAZZINO 02
LOCALE CARICA BATTERIE



PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

WALKABLE LIMIT:

3 kN/m² - 6.27 psf [USA]

4 kN/m² - 8.35 psf [USA]

4.5 kN/m² - 9.40 psf [USA]

5 kN/m² - 10.44 psf [USA]

15 kN/m² - 31.33 psf [USA]

20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY

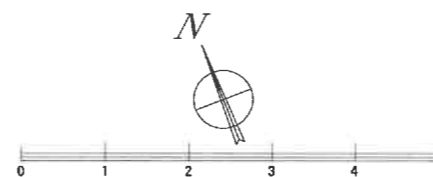



APPENDAGES
NO APPENDAGES IS ALLOWED

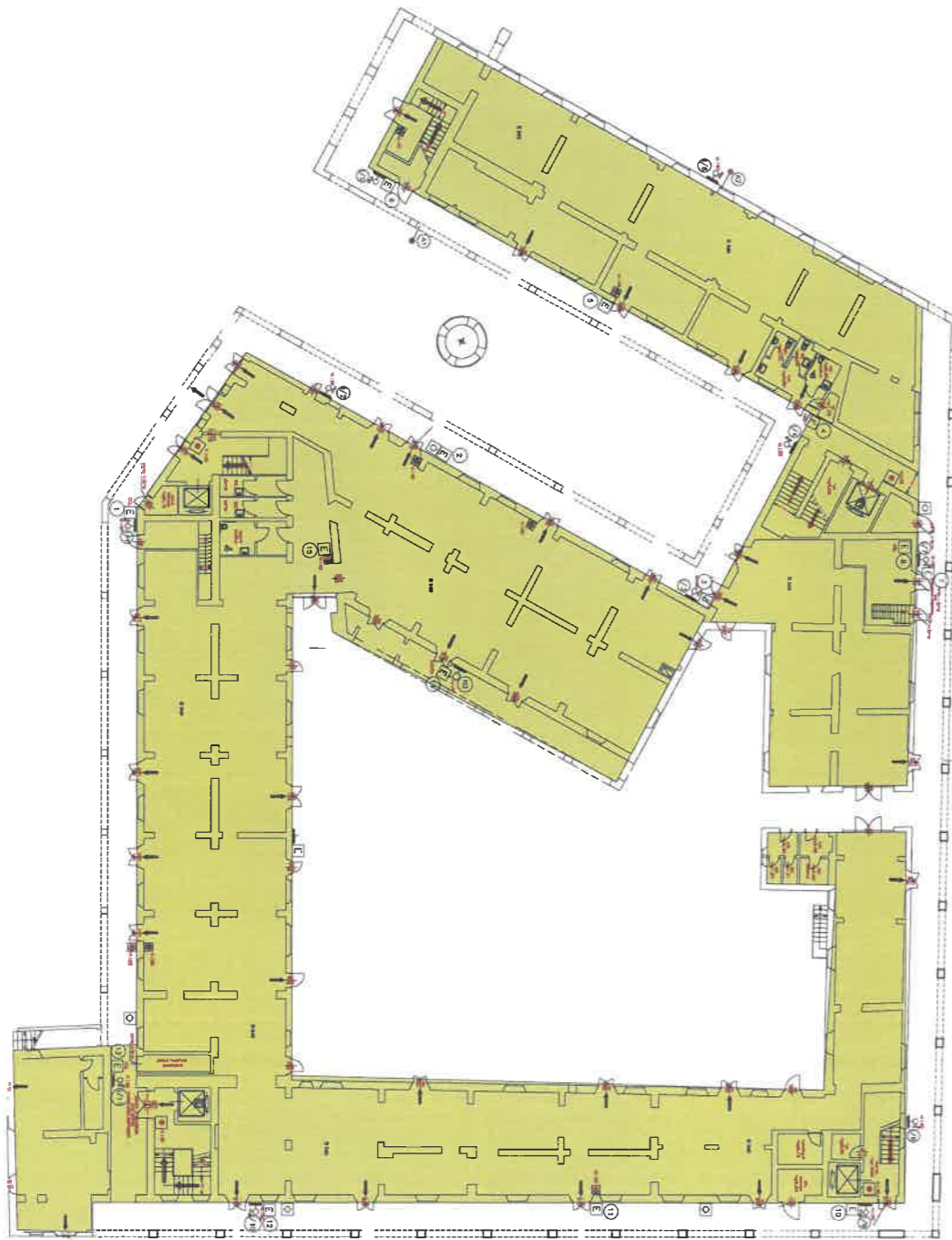
WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

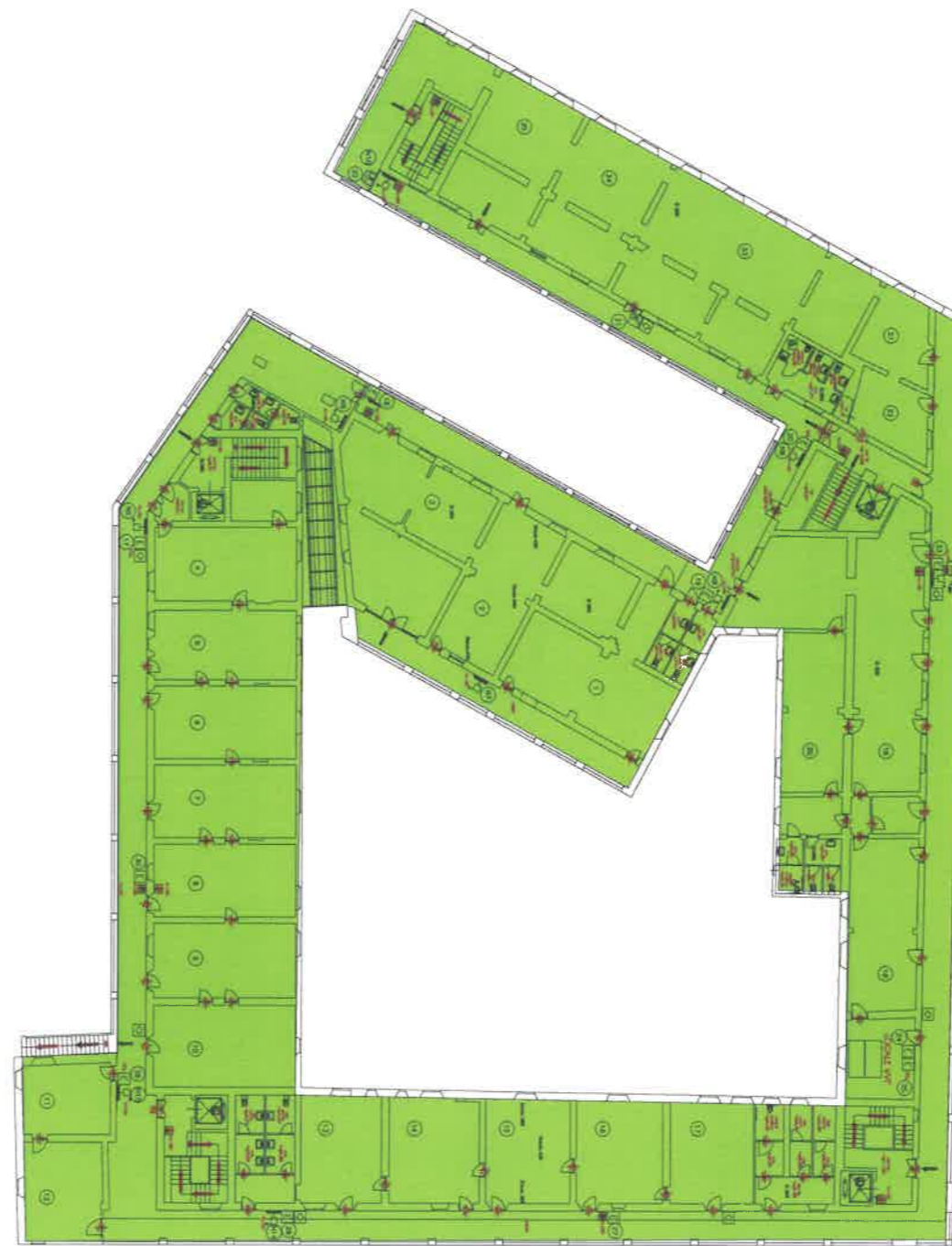
AREAS ZONE	<input type="checkbox"/>
FLOORS	<input checked="" type="checkbox"/>
SLAB	<input checked="" type="checkbox"/>
TUNNEL	<input type="checkbox"/>
RAMPS	<input type="checkbox"/>
ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS	
SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR	



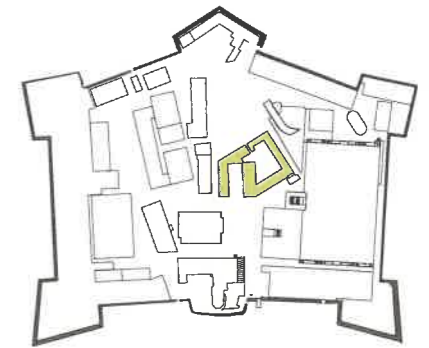
UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK=kN/m ² [(lb/ft ²)]	square footprint	QK = kN (tn)	
C 1				FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED 
C 2				
C 3	5 kN/m ² [10.44 psf]	0.50 x 0.50 m.	5.00 kN [0.50 tn]	
C				
F				
G				



GROUND FLOOR



1st FLOOR



PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

WALKABLE LIMIT:

3 kN/m² - 6.27 psf [USA]

4 kN/m² - 8.35 psf [USA]

4.5 kN/m² - 9.40 psf [USA]

5 kN/m² - 10.44 psf [USA]

15 kN/m² - 31.33 psf [USA]

20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY




APPENDAGES
CHECK OUT FROM TIME TO TIME

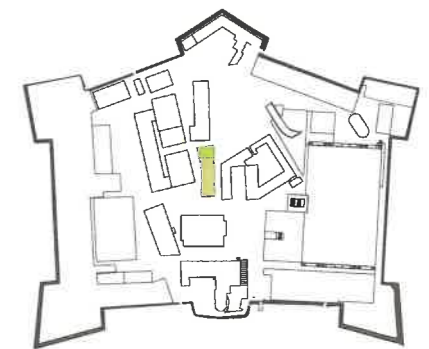
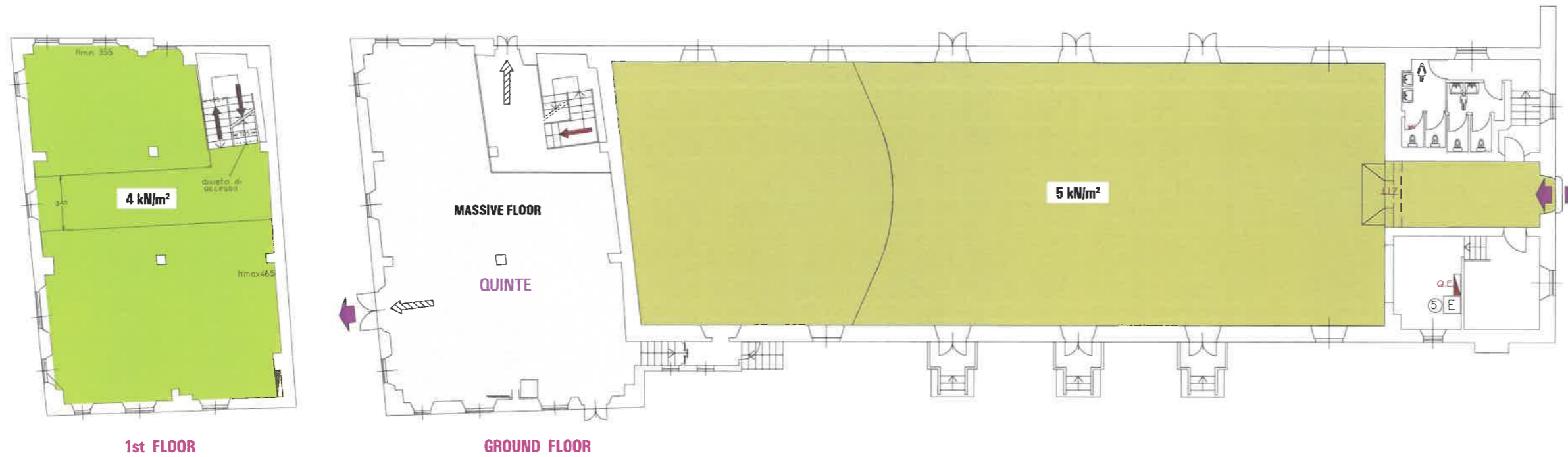
WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	<input type="checkbox"/>	FIXED SEATING AREAS SUCH AS CONFERENCE HALLS FOR PUBLIC USE
FLOORS	<input checked="" type="checkbox"/>	ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMPS	<input type="checkbox"/>	
SLAB	<input type="checkbox"/>	
TUNNEL	<input type="checkbox"/>	

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK=kN/m ² (lb/ft ²)	square footprint	QK = kN (tn)	
C 1		0.50 x 0.50 m.	4.00 kN (0.40 tn) 5.00 kN (0.50 tn)	<p>FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED</p> 
C 2	4 kN/m ² (8.35 psf)			
C 3	5 kN/m ² (10.44 psf)			
C				
F				
G				





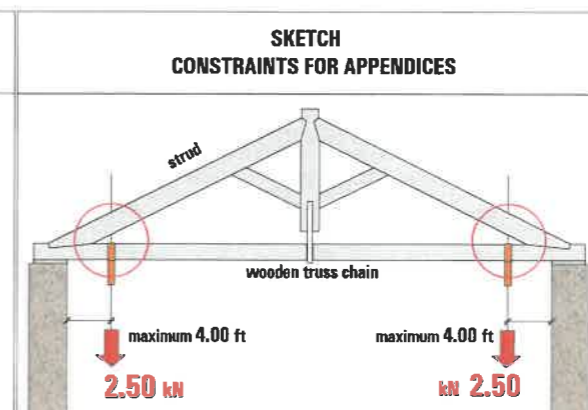
ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored Constraints to be adopted

BOTTOM FLOOR		
GROUND FLOOR	<input checked="" type="checkbox"/> SUPPORTING STRUCTURE WITH COMPOSITE WOOD TRUSS	<input checked="" type="checkbox"/> TO SQUARE TRUSS
PENTHOUSE FLOOR		

SHARED LOAD ON THE SQUARE TRUSS		CONCENTRATED LOAD IN ONE POINT		WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Equipment	[qK = lb / ft]	Equipment	QK = kN [lb]	
	0.25 kN/ml (17 lb/ft)		2.50 kN (550 lb)	1. All suspended loads must have the main hook or cable, in addition to the <u>security</u> one 2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)



WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS	<input checked="" type="checkbox"/> FIXED SEATING AREAS SUCH AS CONFERENCE HALLS FOR PUBLIC USE
FLOORS	<input checked="" type="checkbox"/> ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMP	
SLAB	
TUNNEL	<input checked="" type="checkbox"/> SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK=kN/m² [lb/ft²]	square footprint	QK = kN [lb]	
C 1		0.50 x 0.50 m.		FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
C 2	4 kN/m² (82 psf)		4 kN (0.40 t)	
C 3	5 kN/m² (102 psf)		5 kN (0.50 t)	
C				
F				
G				
-				

NOTE (*)
IT IS ALWAYS PREFERABLE TO MAKE CONNECTIONS LOADS AT THE NODE BETWEEN THE CHAIN AND THE TRUSS STRUD

HOWEVER, THE MAX DISTANCE FROM THE SUPPORTS NOT GREATER THAN 1.20 m (4 ft) IT MUST BE RESPECTED

PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

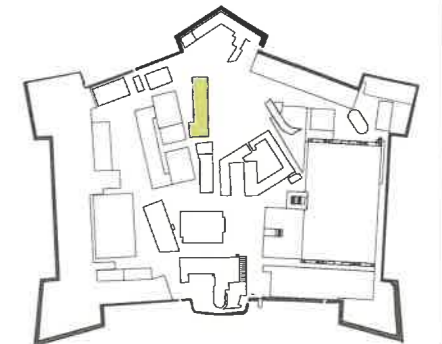
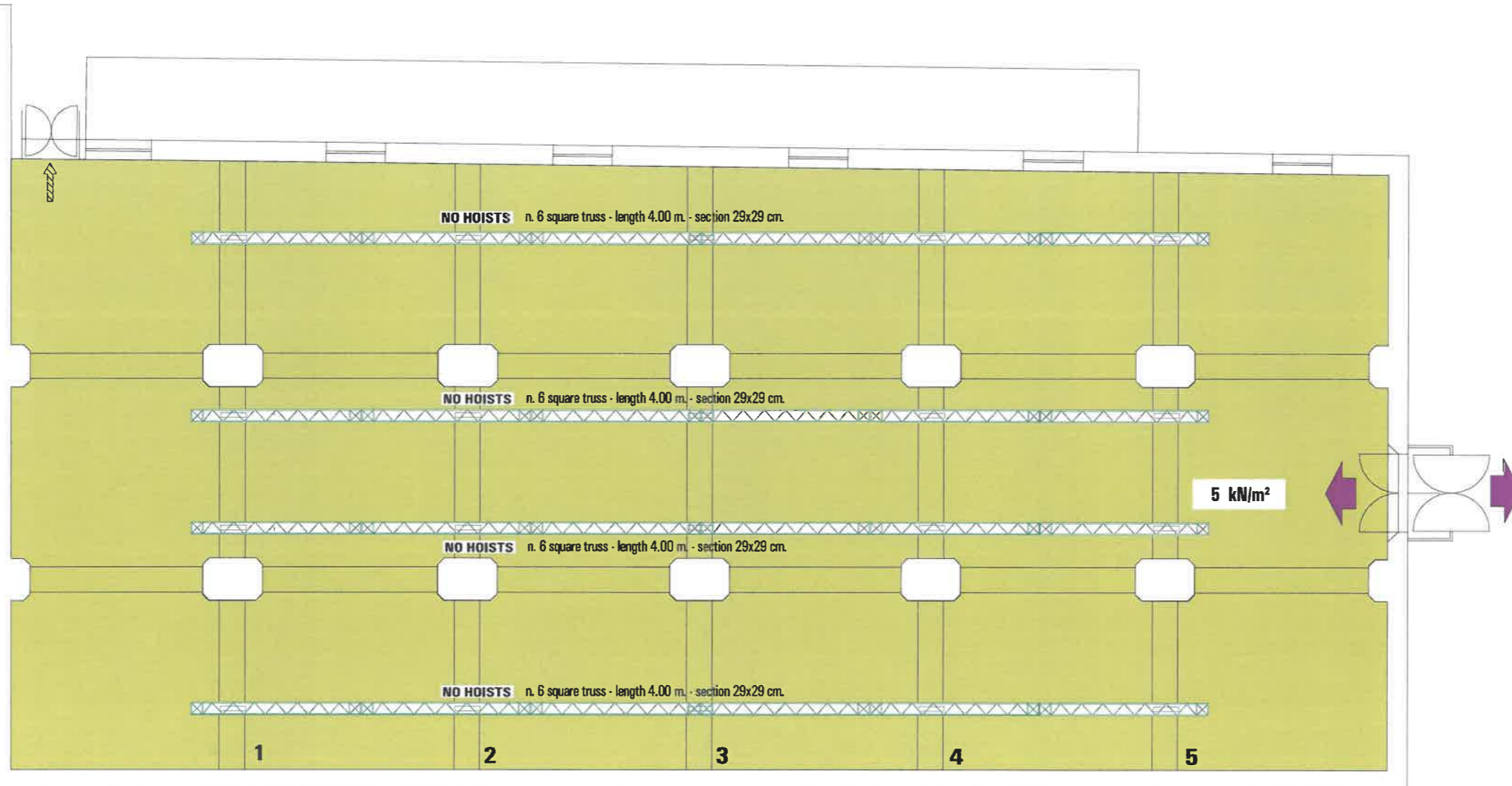
WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY




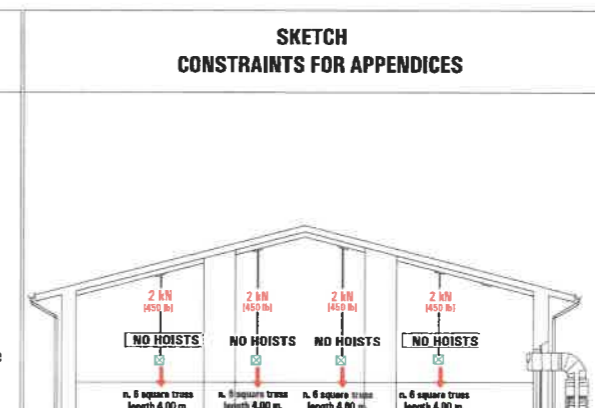
ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored Constraints to be adopted

-1 BOTTOM FLOOR		
GROUND FLOOR	BRICK TRUSSES REINFORCED WITH STILL PLATES AND EYELETS	n. 4 SQUARE TRUSS ONLY
+1 PENTHOUSE FLOOR		


SHARED LOAD ON THE SQUARE TRUSS		CONCENTRATED LOAD-ONE POINT		WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Equipment	qK = lb / ft	Equipment	QK = kN (lb)	
SQUARE TRUSS	0.36 kN/ml (25 lb/ft)		2 kN (450 lb) perfectly correspondence buttonhole welded on the bracket	1. All suspended loads must have the main hook or cable, in addition to the <u>security</u> one  2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)



WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	
FLOORS	ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMP	
SLAB	
TUNNEL	SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK=kN/m² (lb/ft²)	square footprint	QK = kN (lb)	
C 1				FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED 
C 2				
C 3	5 kN/m² (110.44 psf)	0.50 x 0.50 m.	5 kN (110.50 lb)	
F / G				
E 1				
E 2				

PERMITS FOR ACCESS TO THE FLOOR

APPENDICES:

MAXIMUM FOOTPRINTS ALLOWED

WALKABLE LIMIT:

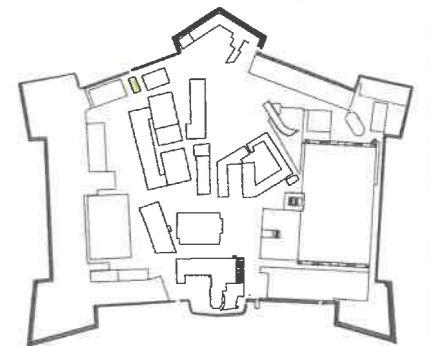
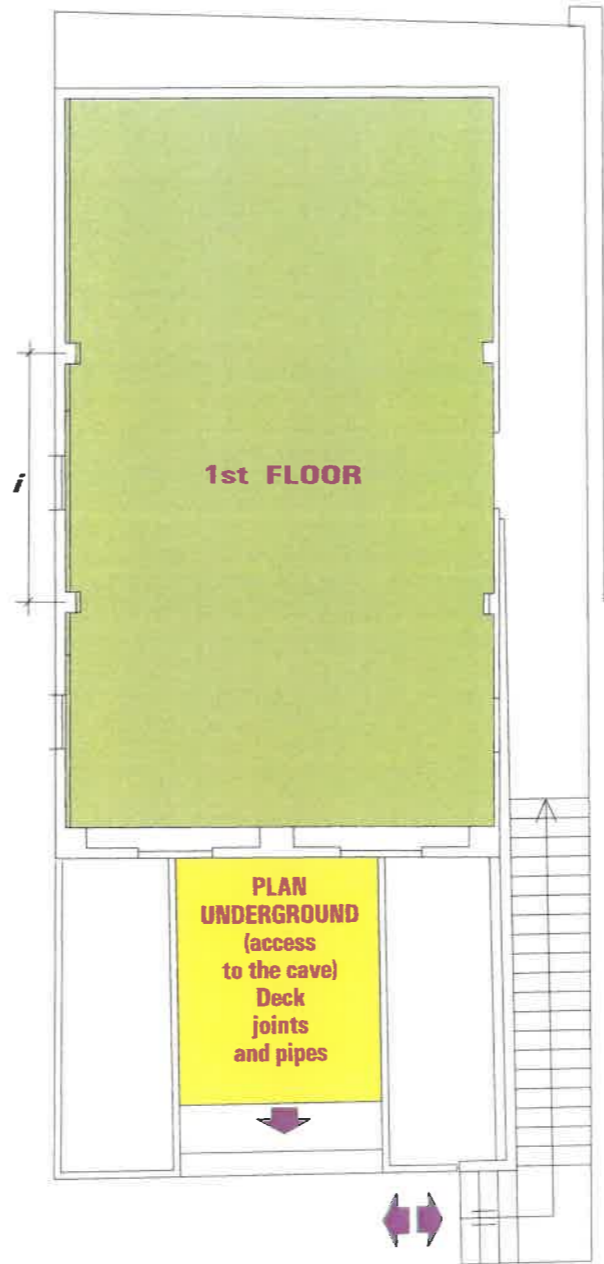
- 3 kN/m² - - 6.872 psf (USPSA)
- 4 kN/m² - - 8.854 psf (USPSA)
- 4.5 kN/m² - - 9.801 psf (USPSA)
- 5 kN/m² - - 110.44 psf (USPSA)
- 15 kN/m² - - 331.33 psf (USPSA)
- 20 kN/m² - - 417.77 psf (USPSA)

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY

NOTE (*)
IN THE CASE OF CONNECTIONS WITH RAILS THE LOAD MUST ALWAYS BE USED INTENDING EQUALLY DISTRIBUTED IN CORRESPONDENCE OF EYELETS

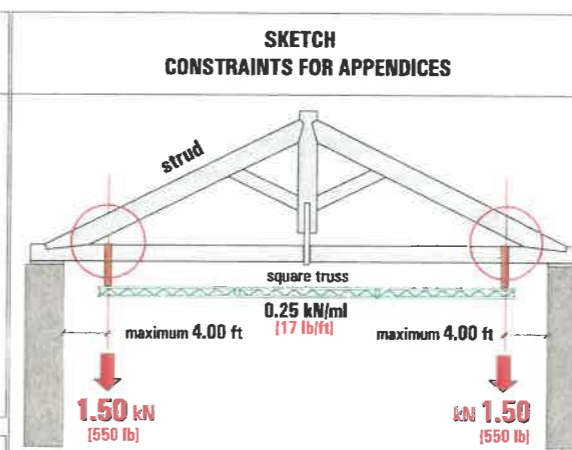


ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored	Constraints to be adopted
-1 BOTTOM FLOOR []	[]
GROUND FLOOR [x] LAMINATED WOODEN TRUSS - SQUARE TRUSS ANCHORAGES	[x] CORRESPONDENCE OF THE KNOT
+1 PENTHOUSE FLOOR []	[]

SHARED LOAD ON THE SQUARE TRUSS		CONCENTRATED LOAD IN ONE POINT		WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Equipment	[qK = lb / ft]	Equipment	QK = kN [lb]	
	0.25 kN/ml [17 lb/ft]		1.50 kN [337 lb]	1. All suspended loads must have the main hook or cable, in addition to the security one
1.00 m [3.28 ft] distance between walls				2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)



PERIMETER AREAS OF BUILDINGS

APPENDAGES:
 MAXIMUM FLOW RATES ALLOWED
 WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

- MASSIVE FLOOR
- ACCESSIBLE ONLY BY FOOT
- DRIVEWAY

WALKABLE LIMIT

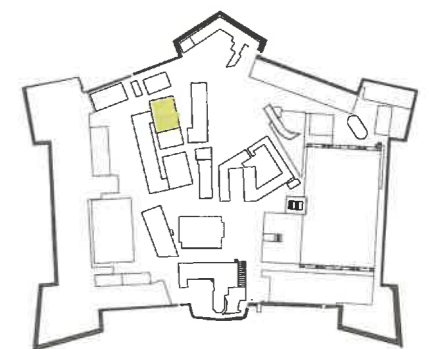
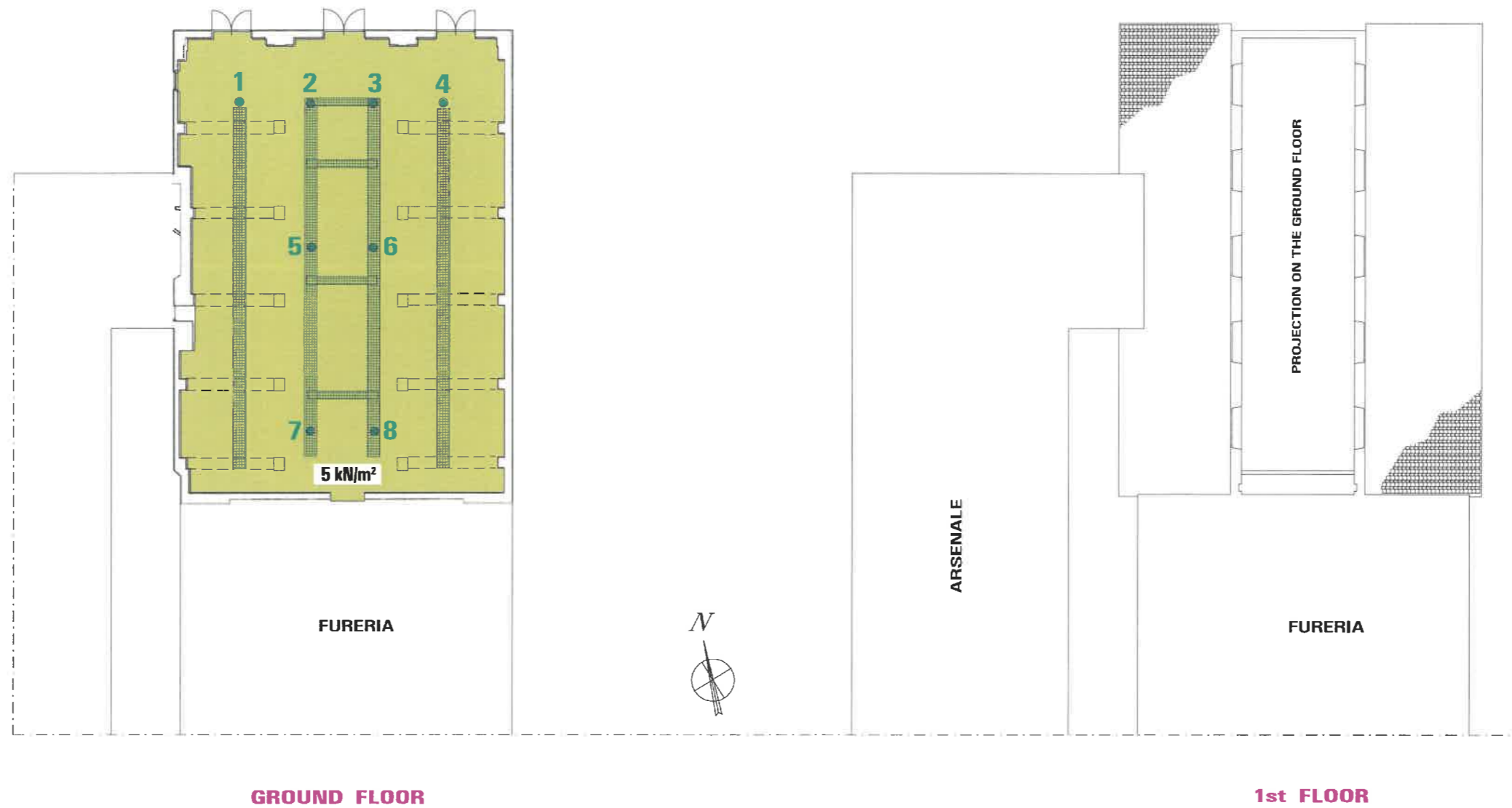
Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

Category	qK = kN/m ² [lb/ft ²]	square footprint	QK = kN [tn]
C 1	3 kN/m ² [6.27 psf]	0.50 x 0.50 m.	3 kN [0.30 tn]
C 2			
C 3	5 kN/m ² [10.44 psf]		5 kN [0.50 tn]
C			
F			
G			

ENVIRONMENTS WITH TABLES, COFFEE, RESTAURANTS AND STAND SUBJECT TO CROWDING
 ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK = kN/m ² [lb/ft ²]	square footprint	QK = kN [tn]	
C 1	3 kN/m ² [6.27 psf]	0.50 x 0.50 m.	3 kN [0.30 tn]	FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
C 2				
C 3	5 kN/m ² [10.44 psf]		5 kN [0.50 tn]	
C				
F				
G				

NOTE (*)
 IT IS REQUIRED TO CONNECT THE INPROSSIMITE HANGING OF THE GRAFT BETWEEN THE STRUT AND THE CHAIN OF THE STRUTTURAL WOODEN TRUSS MUST IN ANY CASE RESPECT THE MAX DISTANCE FROM THE PERIMETER WALLS, NOT GREATER THAN 4.00 ft



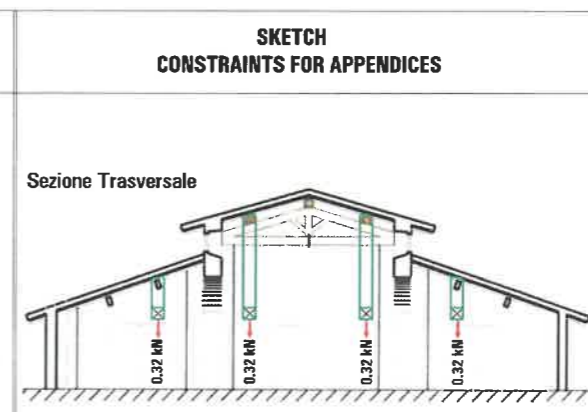
ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored Constraints to be adopted

<input type="checkbox"/> BOTTOM FLOOR		
<input checked="" type="checkbox"/> GROUND FLOOR	LAMINATED WOODEN TRUSS - SQUARE TRUSS ANCHORAGES	TO THE SQUARE TRUSS
<input type="checkbox"/> PENTHOUSE FLOOR		

SHARED LOAD ON THE SQUARE TRUSS		CONCENTRATED LOAD IN THE KNOT		WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Equipment	[qK = lb / ft]	Equipment	[QK = lb]	
	0.32 kN/ml (21.5 lb/ft)		0.32 kN (72 lb)	<p>1. All suspended loads must have the main hook or cable, in addition to the <u>security one</u></p> <p>2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)</p>



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
- MAXIMUM FLOW RATES ALLOWED WALKABLE LIMIT:
- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]
- MASSIVE FLOOR
- ACCESSIBLE ONLY BY FOOT
- DRIVEWAY

WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

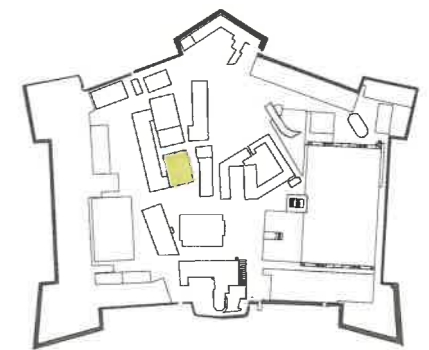
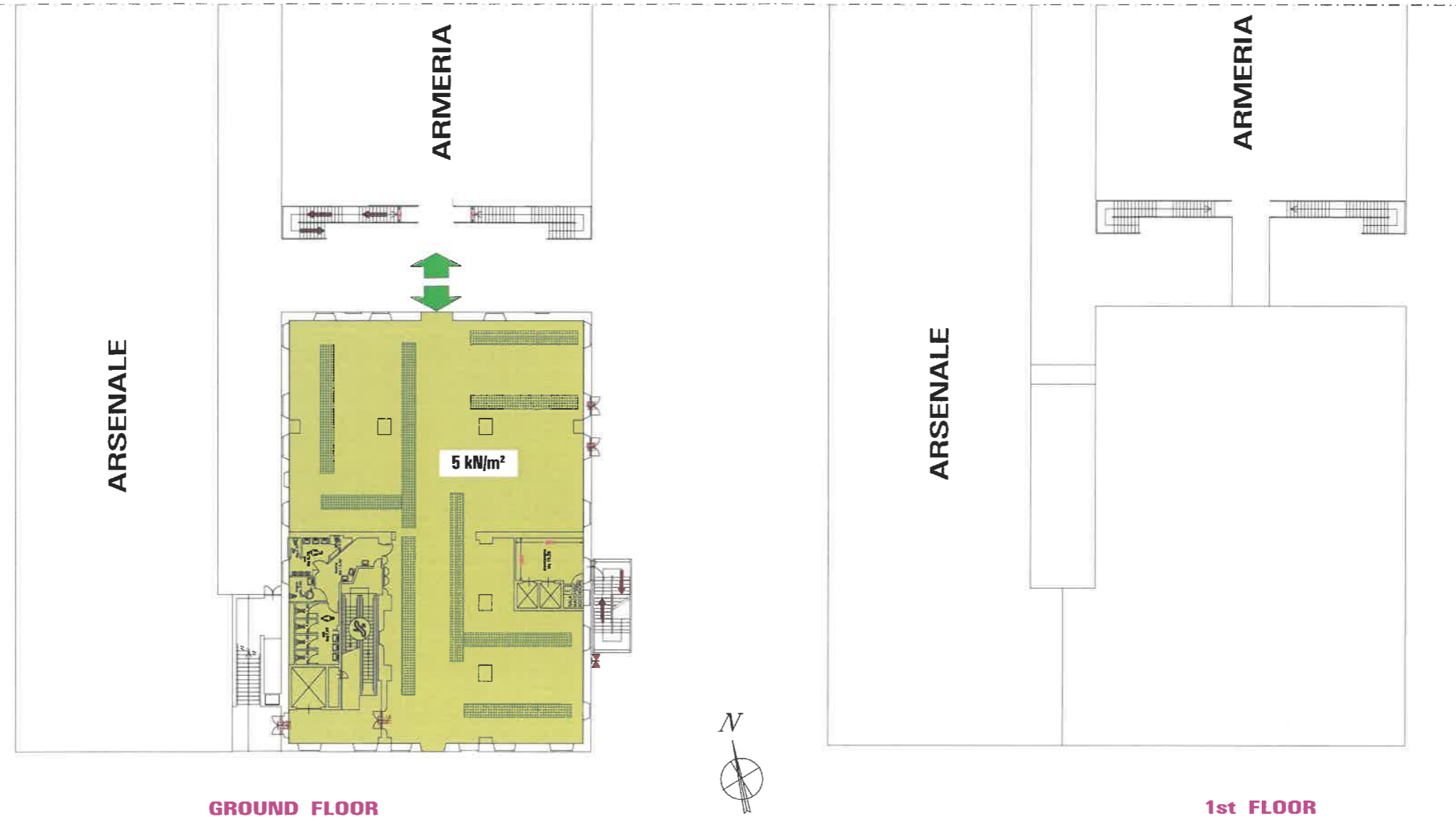
<input type="checkbox"/> AREAS ZONE	
<input checked="" type="checkbox"/> FLOORS	ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
<input type="checkbox"/> RAMPS	
<input type="checkbox"/> SLAB	
<input type="checkbox"/> TUNNEL	

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK = kN/m² [lb/ft²]	square footprint	QK = kN [tn]	
C 1				<p>FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED</p>
C 2				
C 3	5 kN/m² [102 psf]	0.50 x 0.50 m.	5 kN [0.50 tn]	
C				
F				
G				

NOTE (*)

IT IS REQUIRED TO CONNECT THE APPENDIMENT IN CORRESPONDENCE OF THE PURLIN THAT INSISTS BETWEEN THE TWO CONTIGUOUS TRUSSES

HOWEVER, THE MAX DISTANCE BETWEEN THE SUPPORTS, NOT GREATER THAN 4 ft

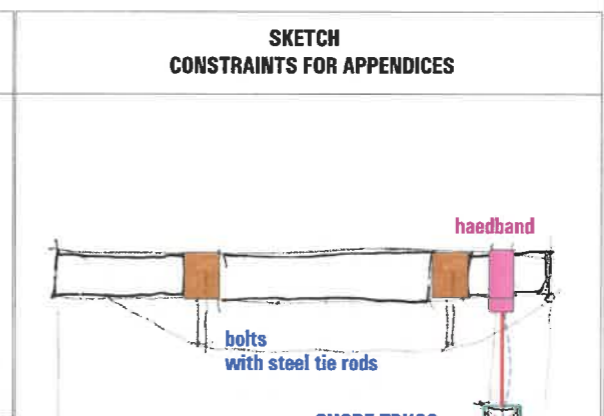


ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored	Constraints to be adopted
-1 BOTTOM FLOOR	<input type="checkbox"/>
GROUND FLOOR	<input checked="" type="checkbox"/> LOAD-BEARING MASONRY STRUCTURE WITH DEVELOPEMENT TURN
+1 PENTHOUSE FLOOR	<input checked="" type="checkbox"/> HANGERS ARRANGED

LOAD CONCENTRATED IN A SINGLE POINT - IN CORRISPONDENCE OF THE KNOT	WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
<p>Equipment</p> <p>QK = kN [lb]</p> <p>0.32 kN [72 lb]</p>	<p>1. All suspended loads must have the main hook or cable, in addition to the <u>security one</u></p> <p>2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)</p>



WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	<input type="checkbox"/>
FLOORS	<input checked="" type="checkbox"/> ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMPS	<input type="checkbox"/>
SLAB	<input type="checkbox"/>
TUNNEL	<input type="checkbox"/>

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK=kN/m² [lb/ft²]	square footprint	QK = kN [ton]	FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
C 1				
C 2				
C 3	5 kN/m² [10.44 psf]	0.50 x 0.50 m.	5 kN [0.50 ton]	
C				
F				
G				

PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

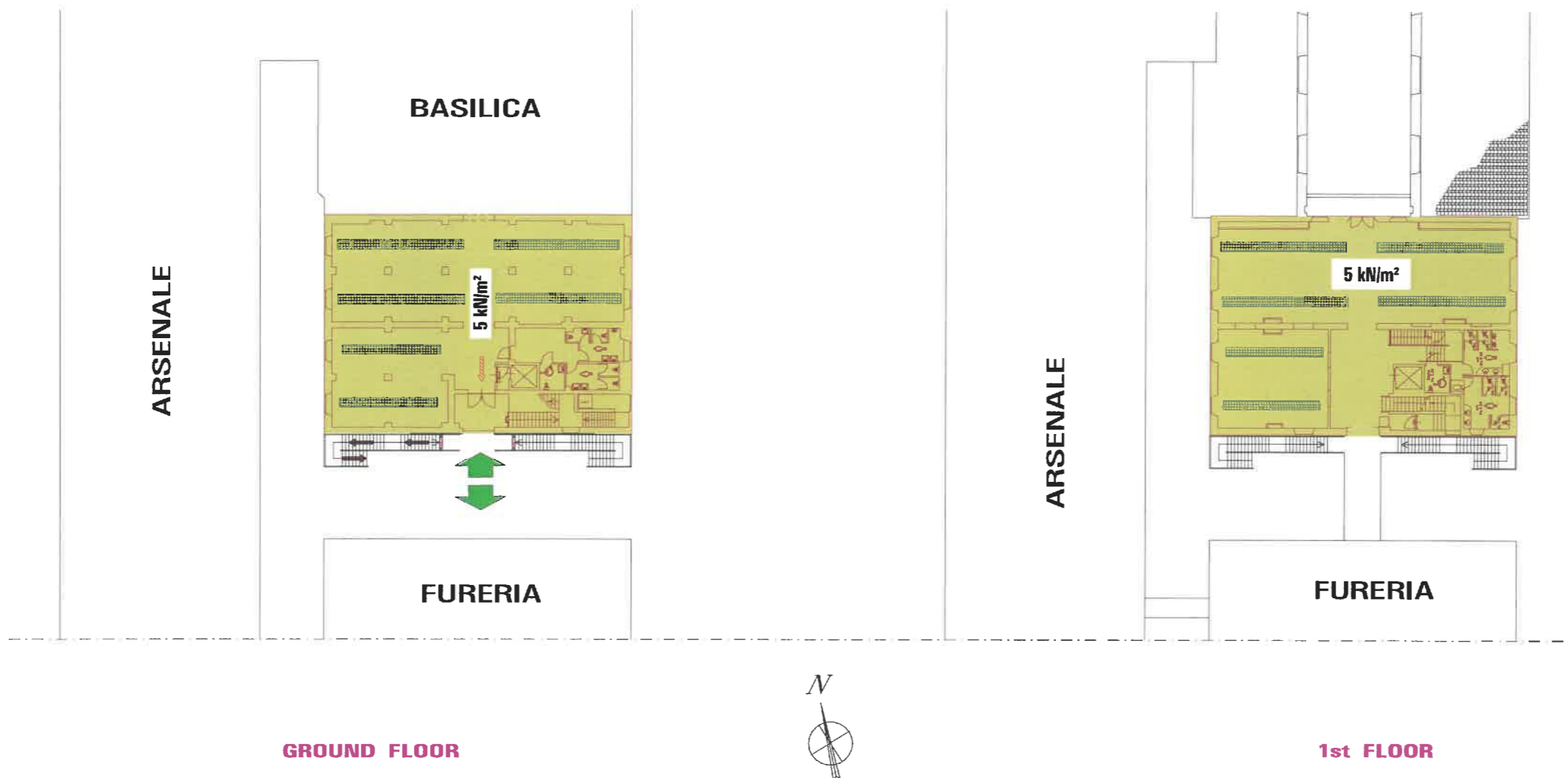
WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY



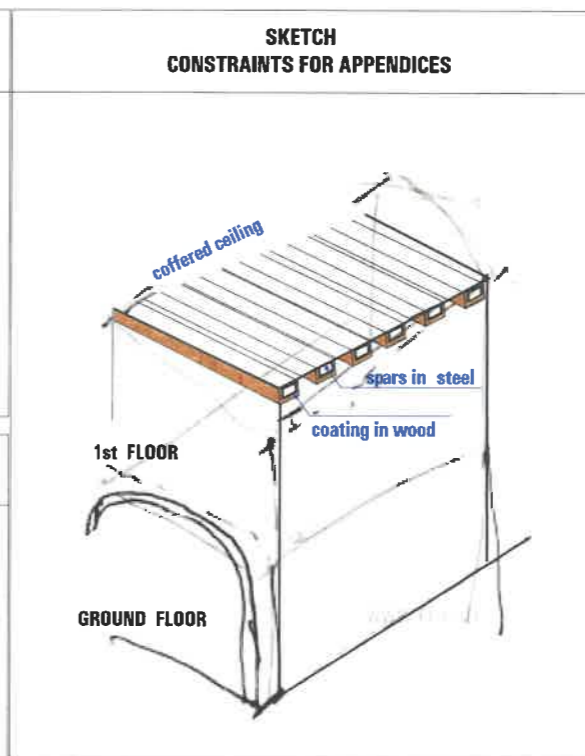
ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored Constraints to be adopted

-1 BOTTOM FLOOR	<input type="checkbox"/>	<input type="checkbox"/>
GROUND FLOOR	<input checked="" type="checkbox"/> LOAD-BEARING MASONRY STRUCTURE WITH DEVELOPEMENT TURN	<input checked="" type="checkbox"/> HANGERS ARRANGED
+1 PENTHOUSE FLOOR	<input type="checkbox"/>	<input type="checkbox"/>

LOAD CONCENTRATED IN A SINGLE POINT - IN CORRISPONDENCE OF THE KNOT		WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Equipment	QK = kN (lb)	1. All suspended loads must have the main hook or cable, in addition to the <u>security one</u> 2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)
	0.32 kN [72 lb]	



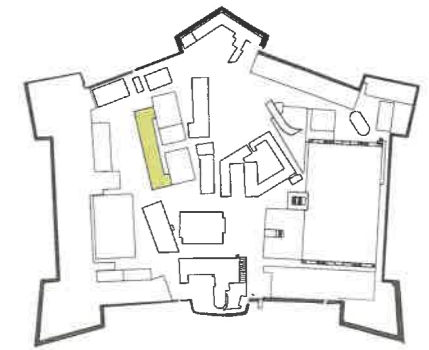
- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:**
- MAXIMUM FLOW RATES ALLOWED
 - WALKABLE LIMIT:**
 - 3 kN/m² - 6.27 psf [USA]
 - 4 kN/m² - 8.35 psf [USA]
 - 4.5 kN/m² - 9.40 psf [USA]
 - 5 kN/m² - 10.44 psf [USA]
 - 15 kN/m² - 31.33 psf [USA]
 - 20 kN/m² - 41.77 psf [USA]
 - MASSIVE FLOOR
 - ACCESSIBLE ONLY BY FOOT
 - DRIVEWAY

WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	<input type="checkbox"/>
FLOORS	<input checked="" type="checkbox"/> ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMP	<input type="checkbox"/>
SLAB	<input type="checkbox"/>
TUNNEL	<input type="checkbox"/>

Category	UNIFORMLY DISTRIBUTED LOAD	VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
	qK=kN/m ² [lb/ft ²]	square footprint	QK = kN [lb]	
C 1				FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
C 2				
C 3	5 kN/m ² [10.44 psf]	0.50 x 0.50 m.	5.00 kN [1,102 lb]	
C				
F				
G				



ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored	Constraints to be adopted
-1 BOTTOM FLOOR	
+1 PENTHOUSE FLOOR	<input checked="" type="checkbox"/> TO THE "ALTALITE" TRUSS <input checked="" type="checkbox"/> TO THE "ALTALITE" TRUSS

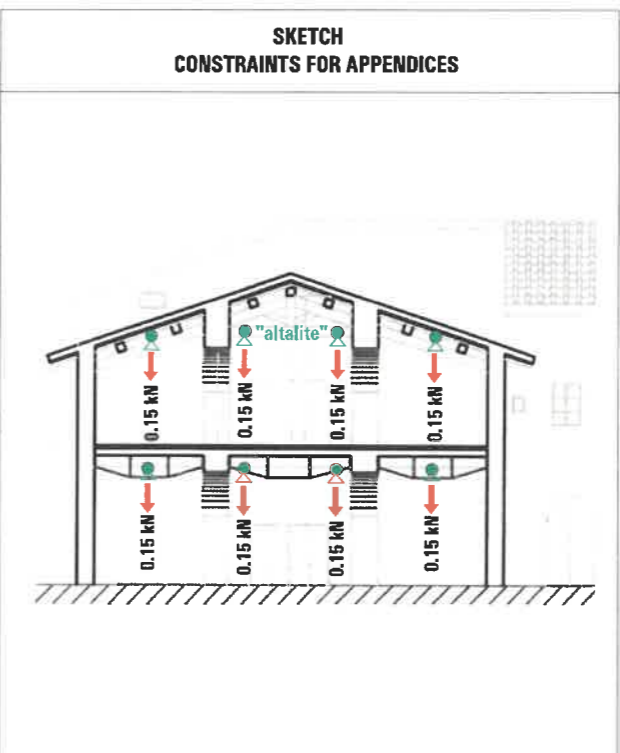
WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

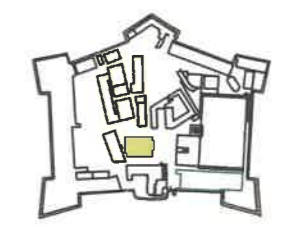
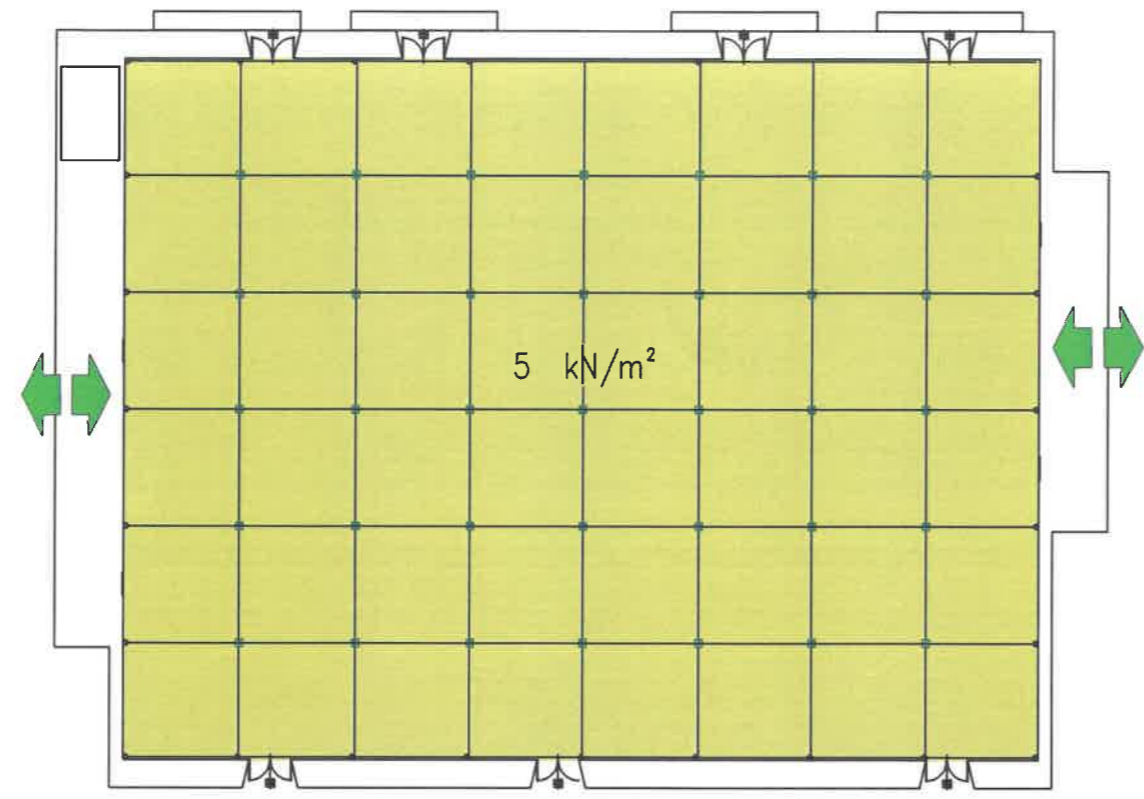
AREAS ZONE	
FLOORS	<input checked="" type="checkbox"/> ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMPS	
SLAB	
TUNNEL	

UNIFORM LOAD DISTRIBUTED		CONCENTRATED LOAD IN ONE POINT		WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Equipment	qK = lb / ft	Equipment	QK = kN (lb)	
	0.15 kN/ml		0.15 kN	1. All suspended loads must have the main hook or cable, in addition to the security one 2. The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)
	0.15 kN/ml		0.15 kN	

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK = kN/m² (lb/ft²)	square footprint	QK = kN (lb)	
C 1				FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
C 2				
C 3	5 kN/m² (102 psf)	0.50 x 0.50 m.	5 kN (10,50 lb)	
C				
F				



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
- MAXIMUM FLOW RATES ALLOWED
- WALKABLE LIMIT:
- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]
- MASSIVE FLOOR
- ACCESSIBLE ONLY BY FOOT
- DRIVEWAY

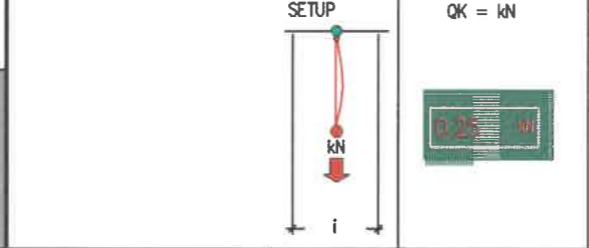


LEARNINGS

Construction system to which loads are required to be anchored Constraints to be adopted

STEEL TUBING OF THE MOBILE SELF-ASSEMBLING STRUCTURE ANCHOR SHOES

CONCENTRATED LOAD ONLY AT EACH LOGARITHMIC (TUBULAR)

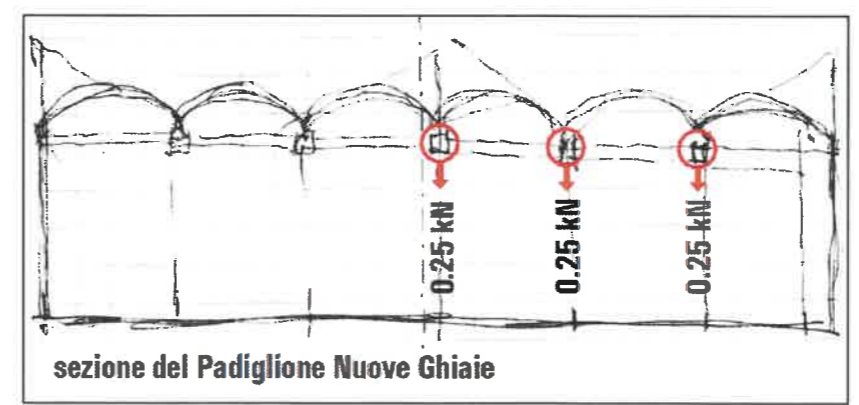


WARNINGS FOR THE CORRECT DISTRIBUTION OF LOADS!

1. ALL SUSPENDED LOADS MUST HAVE THE MAIN HOOK OR CABLE IN ADDITION TO THE SAFETY ONE **SECURITY**.

2. THE CONNECTION OF THE SUSPENSION MUST BE MADE IN PERFECT CORRESPONDENCE WITH THE NODE OF THE SPATIAL ROOFING STRUCTURE

A DRAFT OF CONSTRAINTS FORESEEN FOR HANGINGS!



WALKABILITY

ADMISSIBLE VALUES REFERRING TO THE DIFFERENT CATEGORIES OF USE : N.T.C. 2018 Tabella 3.1.1

EXHIBITION ROOMS WITHOUT OBSTACLES TO THE MOVEMENT OF PEOPLE, EXPOSITION AREAS

UNIFORMLY DISTRIBUTED LOAD

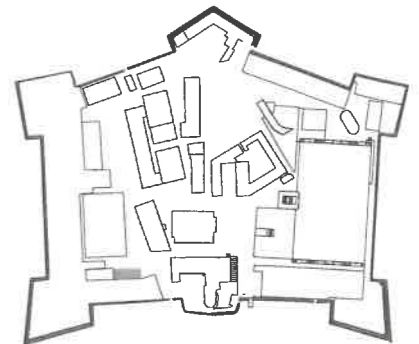
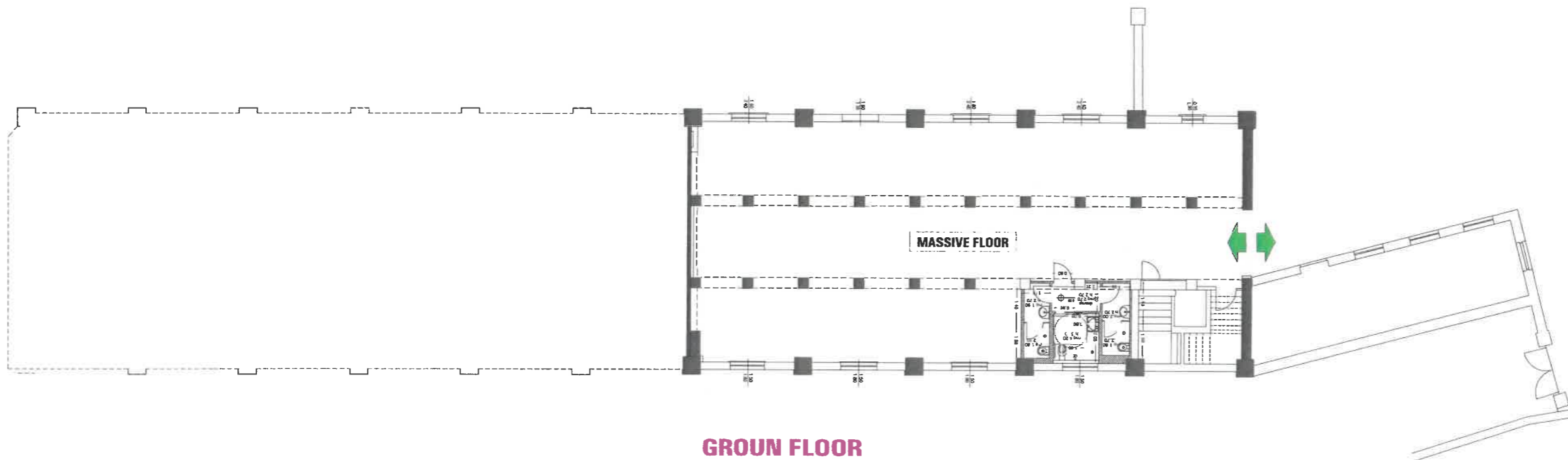
CATEGORY	qK=kN/m²	SQUARE FOOTPRINT	QK = kN
	5 kN/m²	0.50 x 0.50 m.	5.00 kN

WARNINGS FOR FORKLIFT AND VEHICLE ACCESS

FORKLIFTS, TELESCOPIC LIFTS AND INTERNAL COMBUSTION VEHICLES ARE NOT PERMITTED.

- BUILDING AREA PERIMETER!
- APPENDAGES:
- SPECIFIC FLOW RATES ALLOWED
- WALKABILITY:
- 3 kN/m²
- 4 kN/m²
- 4.5 kN/m²
- 5 kN/m²
- 15 kN/m²
- 20 kN/m²
- TERRAPIENO
- PEDESTRIAN ACCESSES
- VEHICULAR ACCESSES!

**EX MAGAZZINO
COMUNALE**



PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

WALKABLE LIMIT:

3 kN/m² - 6.27 psf [USA]

4 kN/m² - 8.35 psf [USA]

4.5 kN/m² - 9.40 psf [USA]

5 kN/m² - 10.44 psf [USA]

15 kN/m² - 31.33 psf [USA]

20 kN/m² - 41.77 psf [USA]

MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY


ENGLISH VERSION

APPENDAGES
CHECK OUT FROM TIME TO TIME

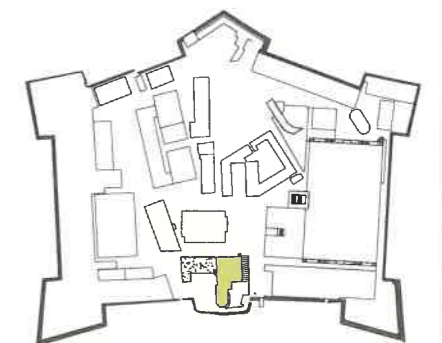
WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

- AREAS USED FOR OFFICES (OPEN AND NOT OPEN TO THE PUBLIC)
- AREAS USED FOR OFFICES (OPEN AND NOT OPEN TO THE PUBLIC)
- AREAS USED FOR OFFICES (OPEN AND NOT OPEN TO THE PUBLIC)
- AREAS USED FOR OFFICES (OPEN AND NOT OPEN TO THE PUBLIC)
- AREAS USED FOR OFFICES (OPEN AND NOT OPEN TO THE PUBLIC)
- SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart		WARNINGS FOR ACCESS OF FORKLIFTS AND VEHICLES
Category	qK = kN/m ² (lb/ft ²)	square footprint	QK = kN (lb)	FORKLIFTS, TELEHANDLERS AND VEHICLES WITH INTERNAL COMBUSTION ARE NOT ALLOWED
B				
C 2				
C 3				
C				
F				
G				

a b c 24
VOLTA - ARCO
OTTAGONALE
SALA DELLE COLONNE
MONUMENTALE



GROUND FLOOR
0 1 2 3 4 5 10mt

ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored	Constraints to be adopted
<input checked="" type="checkbox"/> SUPPORTING MASONRY STRUCTURE WITH ARCHWAY SURFACE <input type="checkbox"/> BOTTOM FLOOR <input type="checkbox"/> GROUND FLOOR <input type="checkbox"/> PENTHOUSE FLOOR	<input checked="" type="checkbox"/> TO THE EXISTING HOOK <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

CONCENTRATED LOAD ONLY IN CORRESPONDENCE OF THE PREPARED HOOK	
Equipment 	QK = kN [lb] 2 kN [450 lb]

WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS

- All suspended loads must have the main hook or cable, in addition to the security one
- The link of the appraisal it must be made in perfect correspondence of the HOOK that is present in the Octagonal room



WALKABLE LIMIT

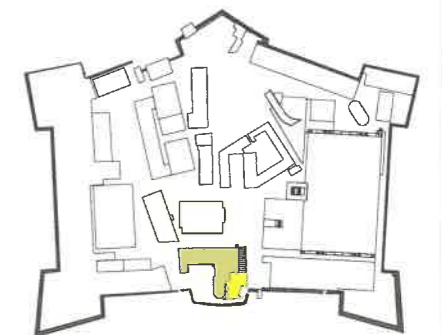
Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	<input type="checkbox"/>
FLOORS	<input checked="" type="checkbox"/> ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMP	<input checked="" type="checkbox"/> METALLIC BRIDGE FOR ACCESS INTENSIVE TRANSIT - LOADING / UNLOADING DEPOT
SLAB	<input checked="" type="checkbox"/> SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR
TUNNEL	<input type="checkbox"/>

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	
Category	qK = kN/m² [lb/ft²]	square footprint	QK = kN [tm]
C 1			
C 2			
C 3	5 kN/m² [102 psf]	0.50 x 0.50 m.	5 kN [0.58 tm]
C			
F	15 kN/m² [307 psf]	1.00 x 1.00 m.	20 kN [2.04 tm]
G			
-			

- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:
 - MAXIMUM FLOW RATES ALLOWED
 - WALKABLE LIMIT:
 - 3 kN/m² - 6.27 psf [USA]
 - 4 kN/m² - 8.35 psf [USA]
 - 4.5 kN/m² - 9.40 psf [USA]
 - 5 kN/m² - 10.44 psf [USA]
 - 15 kN/m² - 31.33 psf [USA]
 - 20 kN/m² - 41.77 psf [USA]
 - MASSIVE FLOOR
 - ACCESSIBLE ONLY BY FOOT
 - DRIVEWAY

d **e** **f** **24**
EX UFFICI
SALA DELLA SCHERMA
CANNONIERA
MONUMENTALE



GROUND FLOOR
0 1 2 3 4 5 10m

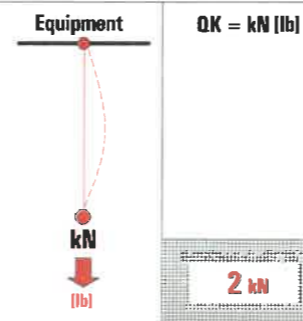
ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored Constraints to be adopted

-1 BOTTOM FLOOR		
GROUND FLOOR		
+1 PENTHOUSE FLOOR	<input checked="" type="checkbox"/> SOLID COMPOSITE IN WOOD SQUARE AND BRACKETS	<input checked="" type="checkbox"/> KNOTS CORRESPONDENCE

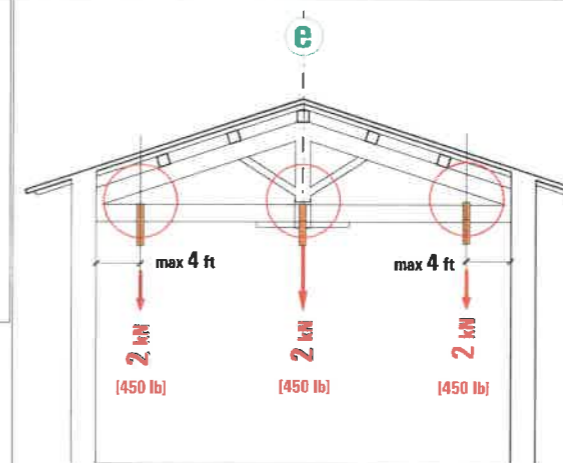
CONCENTRATED LOAD ONLY IN CORRESPONDENCE OF THE NODES



WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS

- All suspended loads must have the main hook or cable, in addition to the security one
- The link of the appraisal it must be made in perfect correspondence of the node of each node of the spatial structure (bracket)

SKETCH CONSTRAINTS FOR APPENDICES



NOTE (*)
POINT APPENDAGES CAN BE ARRANGED ONLY IF CONCENTRATED AT THE KNOT, RESPECTING THE MAXIMUM DISTANCE FROM THE WALLS NOT GREATER THAN 4 ft

WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

AREAS ZONE	<input checked="" type="checkbox"/> ENVIRONMENTS WITH TABLES, COFFEE, RESTAURANTS AND STAND SUBJECT TO CROWDING
FLOORS	<input checked="" type="checkbox"/> ENVIRONMENTS AND ROOMS WITHOUT OBSTACLES TO MOVEMENT, SUITED FOR LARGE CROWDS
RAMPS	
SLAB	
TUNNEL	<input checked="" type="checkbox"/>

UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	
Category	qK = kN/m² (lb/ft²)	square footprint	QK = kN (ton)
C 1	3 kN/m² (61 psf)	0.50 x 0.50 m.	3 kN (0.30 ton)
C 2	4 kN/m² (81 psf)		4 kN (0.40 ton)
C 3	5 kN/m² (102 psf)		5 kN (0.50 ton)
C			
F			
G			

PERIMETER AREAS OF BUILDINGS

APPENDAGES:

MAXIMUM FLOW RATES ALLOWED

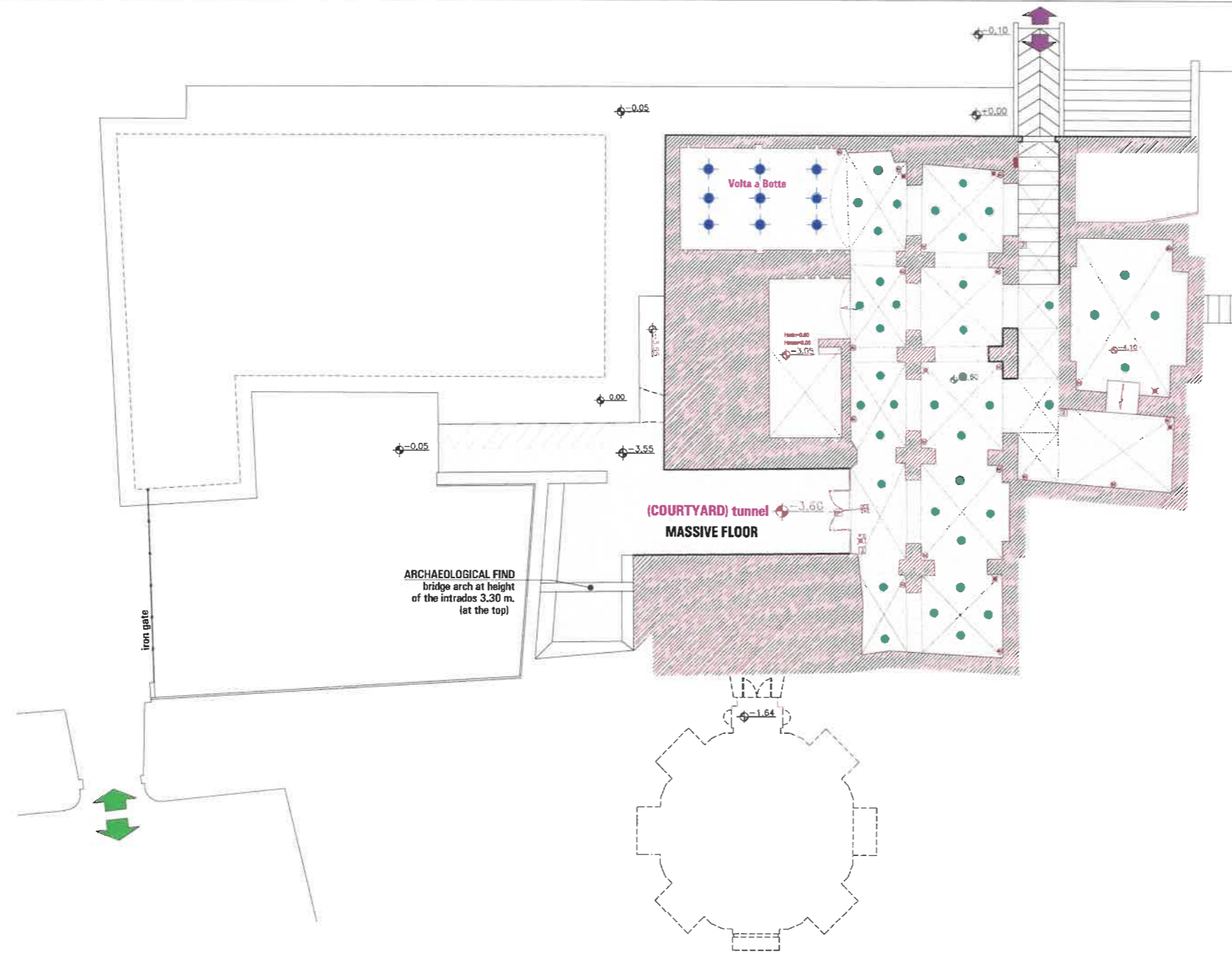
WALKABLE LIMIT:

- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]

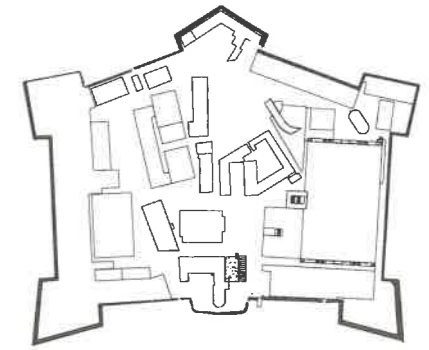
MASSIVE FLOOR

ACCESSIBLE ONLY BY FOOT

DRIVEWAY



BOTTOM FLOOR
0 1 2 3 4 5 10mt



- PERIMETER AREAS OF BUILDINGS
- APPENDAGES:**
- MAXIMUM FLOW RATES ALLOWED
- WALKABLE LIMIT:**
- 3 kN/m² - 6.27 psf [USA]
- 4 kN/m² - 8.35 psf [USA]
- 4.5 kN/m² - 9.40 psf [USA]
- 5 kN/m² - 10.44 psf [USA]
- 15 kN/m² - 31.33 psf [USA]
- 20 kN/m² - 41.77 psf [USA]
- MASSIVE FLOOR
- ACCESSIBLE ONLY BY FOOT
- DRIVEWAY

ENGLISH VERSION

APPENDAGES

Constructive system to which loads are required to be anchored	Constraints to be adopted
<input checked="" type="checkbox"/> MECHANICAL EXPANSION DOWELS FIXED IN THE WALL	<input checked="" type="checkbox"/> CAP, "S" HOOK
<input checked="" type="checkbox"/> PLATE EYELET ON CAST THREADED BAR (RESIN)	<input checked="" type="checkbox"/> CAP, "S" HOOK
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

CONCENTRATED LOAD ONLY IN CORRESPONDENCE WITH THE TYPE OF PLUG			Equipment	QK = kN [lb]	WARNINGS FOR CORRECT USE DISTRIBUTION OF LOADS
Symbol	Type				
	type A (mechanical)			0.25 kN	1. All suspended loads must have the main hook or cable, in addition to the <u>security</u> one 2. The graphic representation of anchors is purely indicative (check correct arrangement)
	type B (cast-in)			1 kN	

WALKABLE LIMIT

Permissible values referring to the different categories of use: N.T.C. 2018 Tab. 3.1.II

<input type="checkbox"/> RAMP	<input type="checkbox"/> AREA	<input type="checkbox"/> ZONE	<input type="checkbox"/>
<input type="checkbox"/> FLOOR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SLAB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> TUNNEL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> SOLIDARY BUILDING ON EXISTING BALLAST - MASSIVE FLOOR			

Category	UNIFORMLY DISTRIBUTED LOAD		VERTICAL CONCENTRATED LOADS n 2 loading footprints 1.80 m apart	
	qK=kN/m ² [lb/ft ²]	square footprint	QK = kN [lb]	
C 1				
C 2				
C 3				
C				
F				
G				
.				