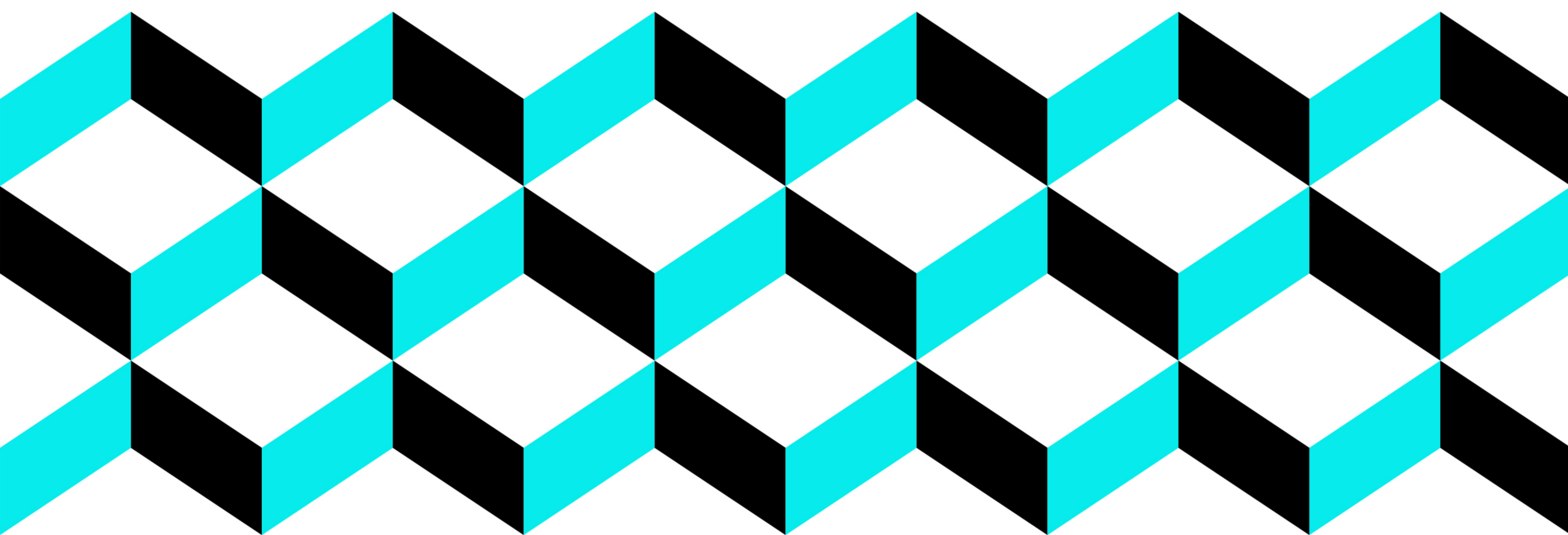




C-MODULAR

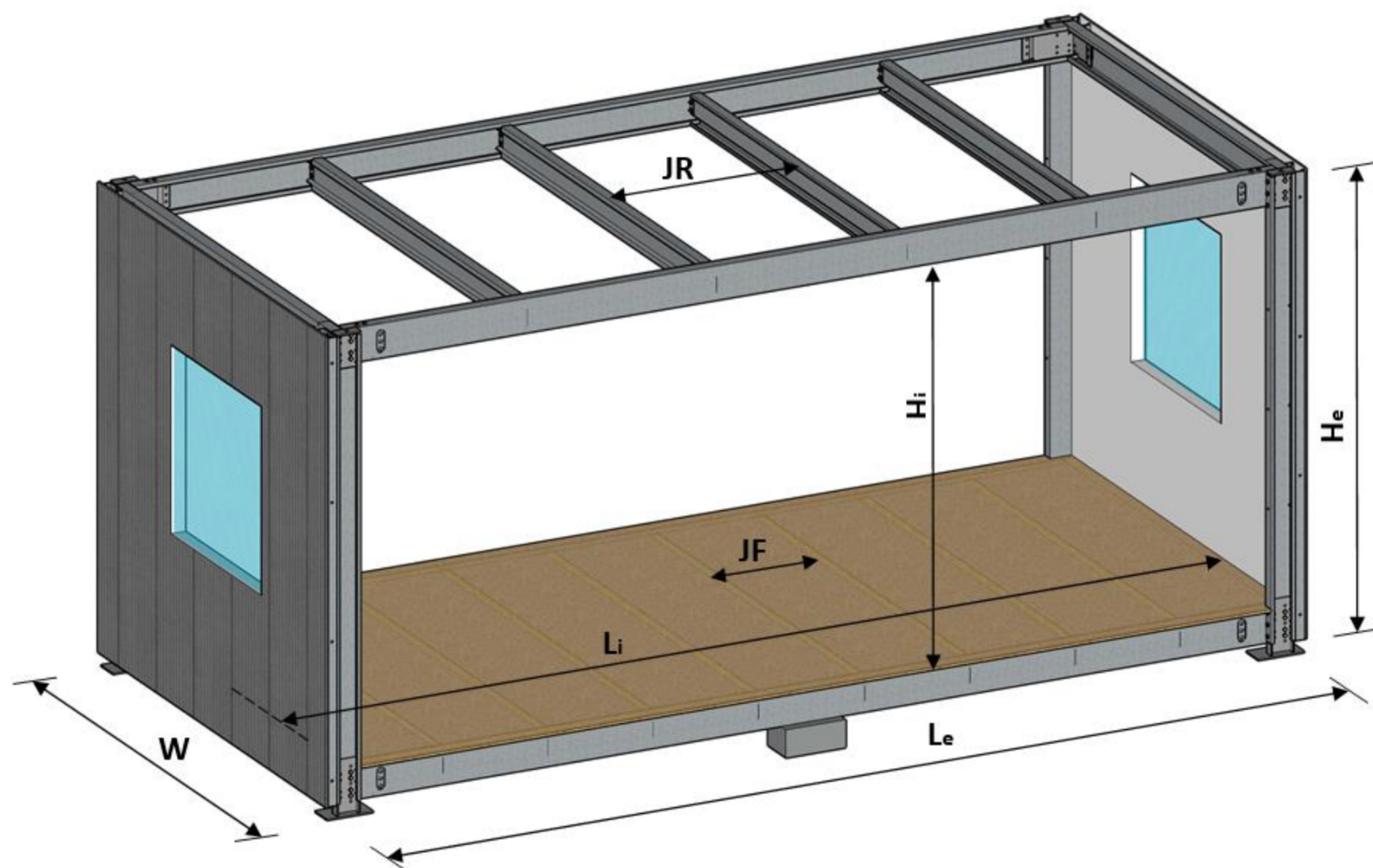
Modulair Bouw Zeeland



C-MODULAR SCHAKELN & STAPELEN

STANDARD DIMENSIONS:

- » **Li** = 6,38m (inside wall cladding = outside main beam)
- » **Le** = Li + 2x thickness of wall cladding
- » **W** = 3,0m (outside column)
- » **He** = 3,0m (from underside floor beam to upperside roof beam)
- » **Hi** = 2,56m (from upperside floor beam to underside roof beam)
- » **JF** = 0,7m (floor joist distance, see fig. 11, 12)
- » **JR** = 1,26m (roof joist distance)



CUSTOMIZED DIMENSIONS:

POSSIBLE FOR SERIE > 10 IDENTICAL MODULES:

- » **Li** ≤ 6,38m (inside wall cladding = outside main beam)
- » **W**: 2,1 → 3,5m (outside column)
- » **He**: 2,6 → 3,3m (from underside floor beam to upperside roof beam)
- » **Hi** = He - 440mm
- » **C**: 2,0 → 3,0m (fig. 4)
- » **JF**: 0,4 → 1,2m (fig. 11, 12)

L, W, He, Hi, JF may be selected from the above range.



C-MODULAR

Modulair
Bouw Zeeland

➤ BUILDING CONFIGURATIONS

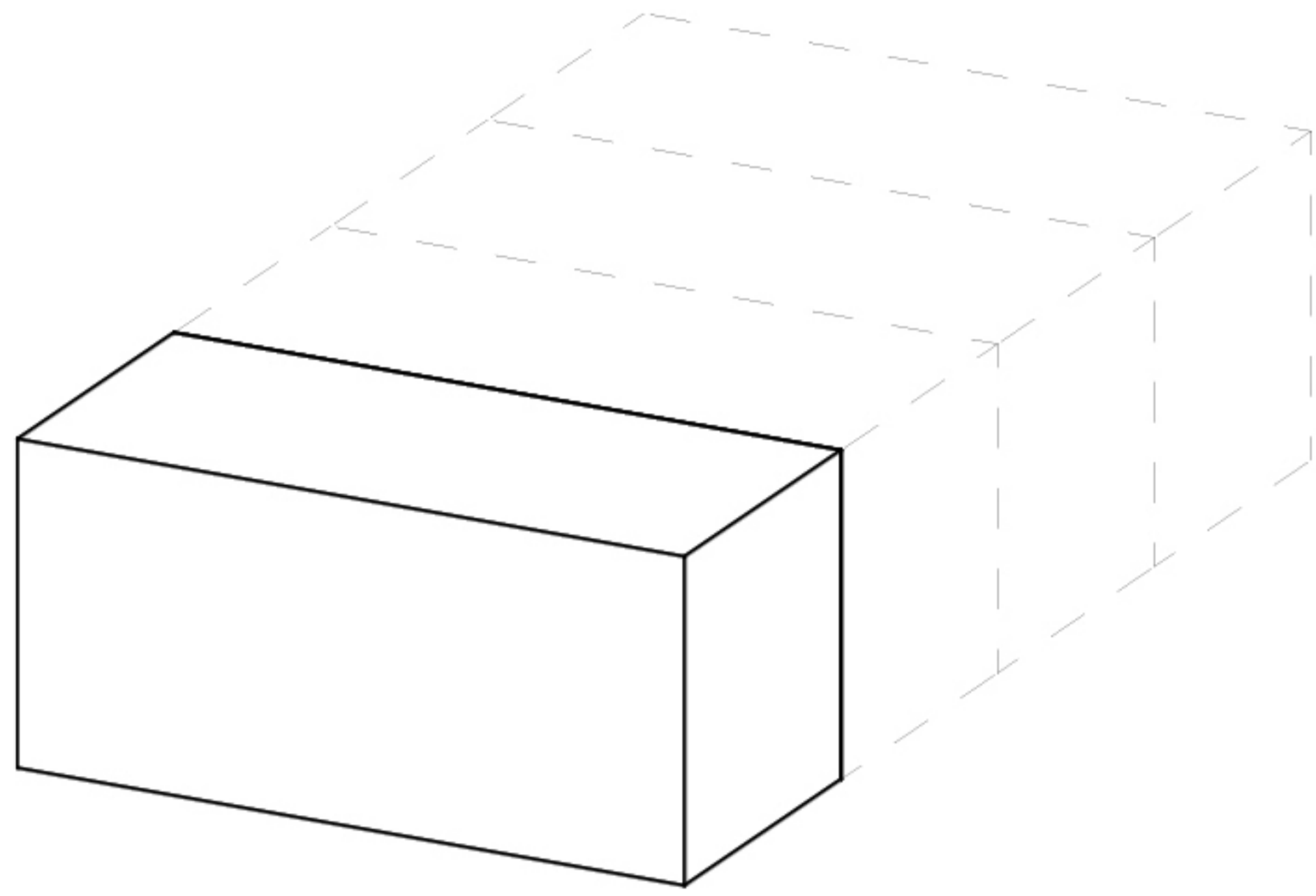


Fig. 2. **Ground floor.**

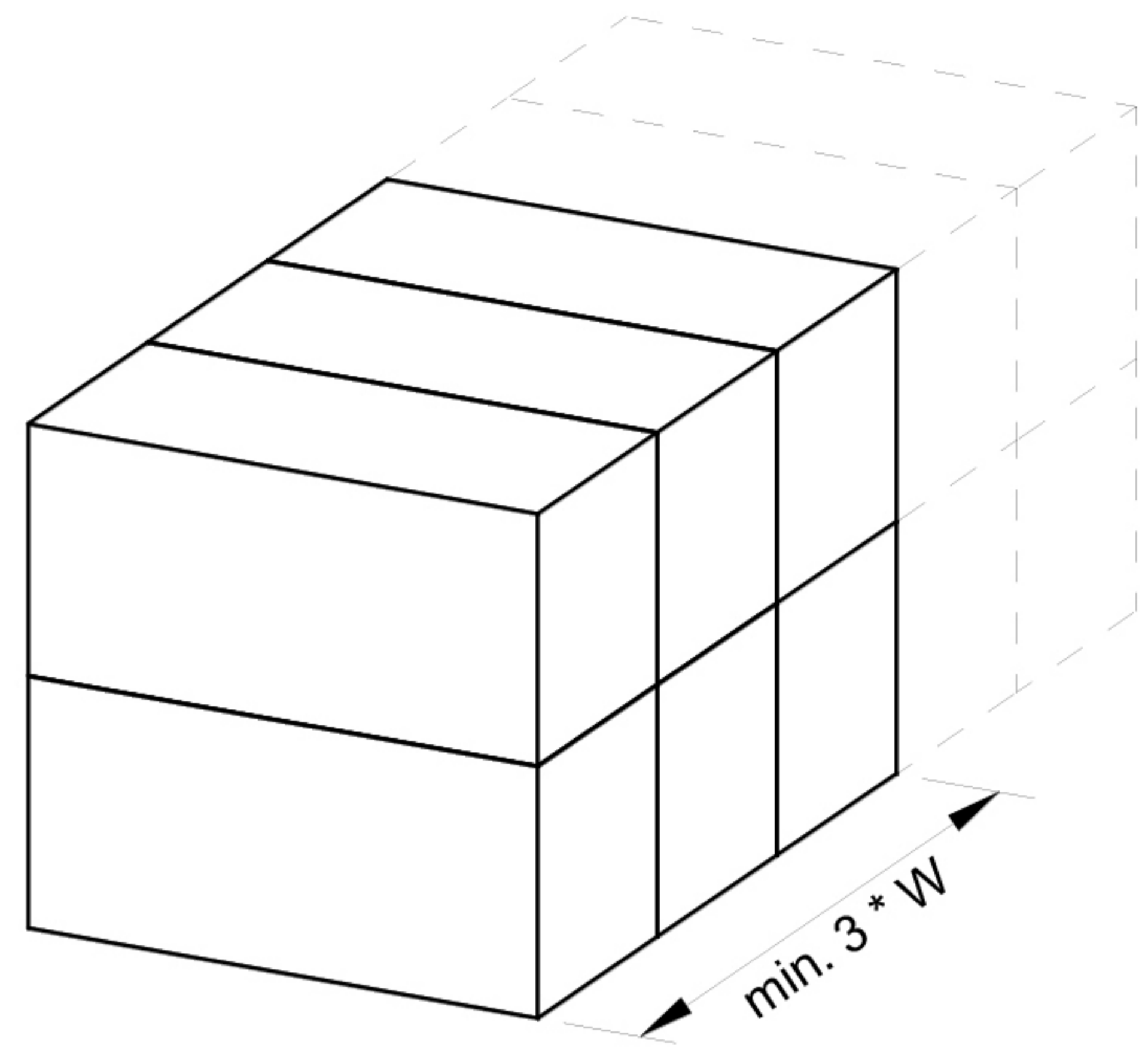


Fig. 3a. **Two floors building bloc.**

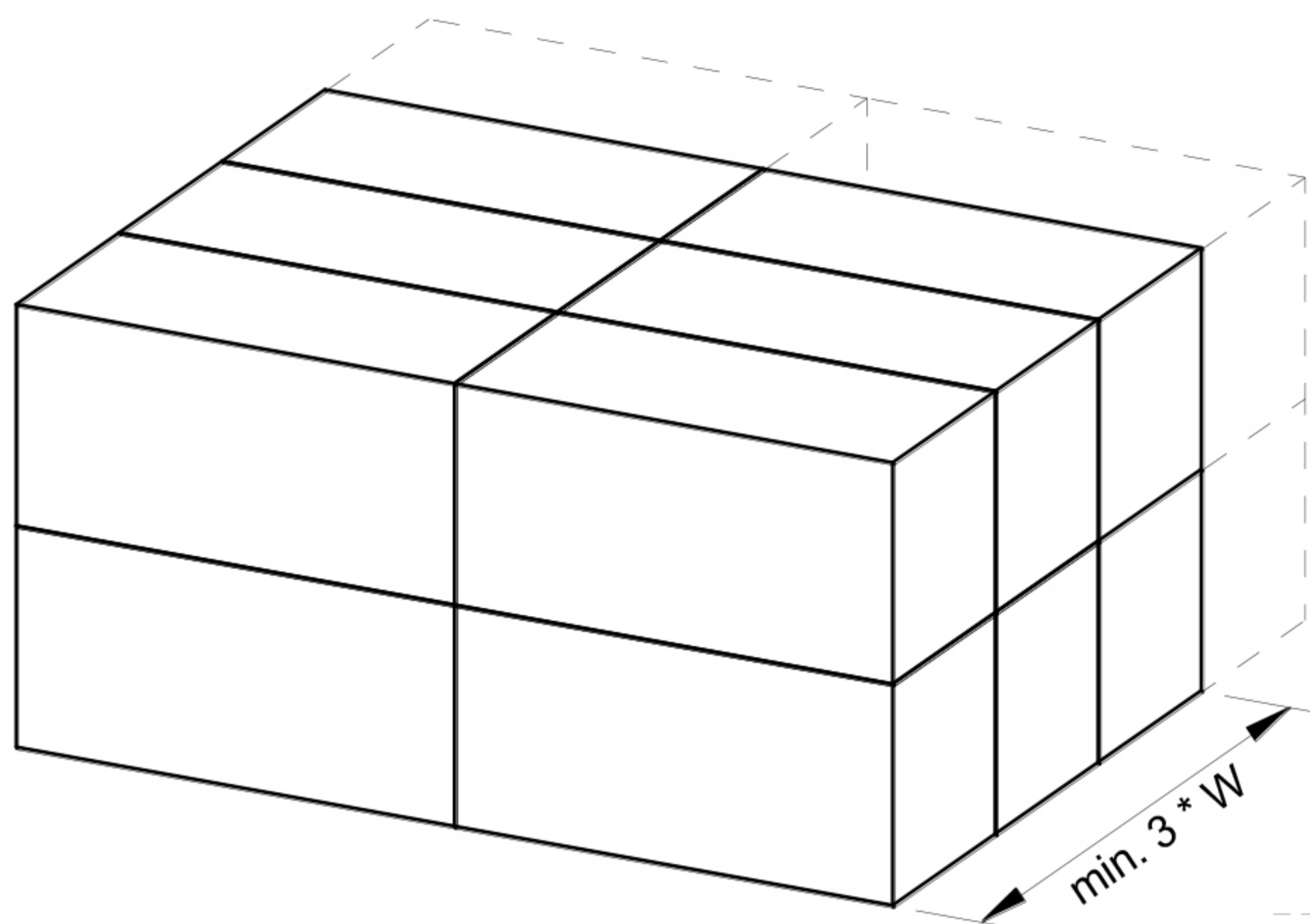


Fig. 3b. **Two floors building bloc.**

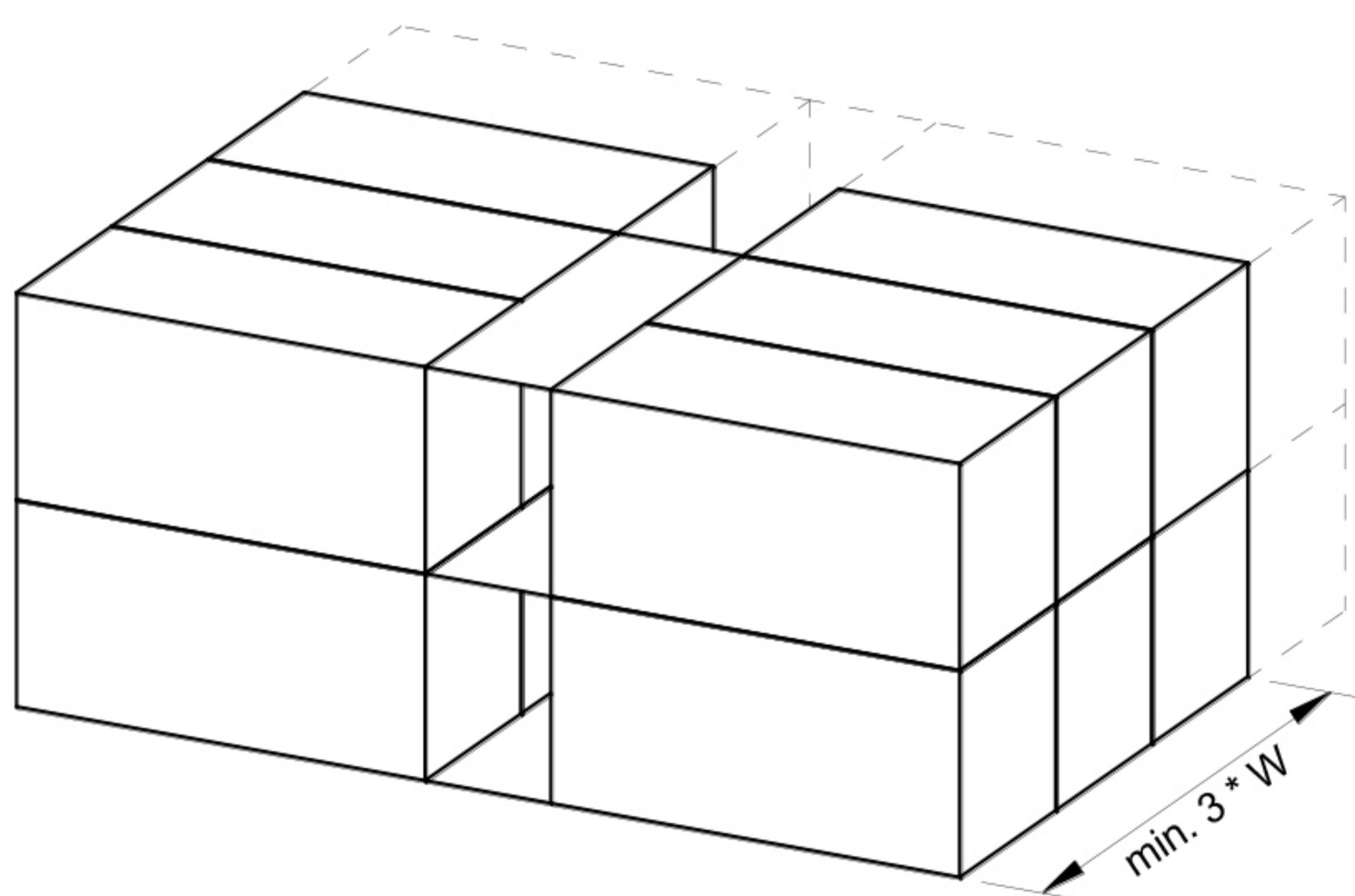
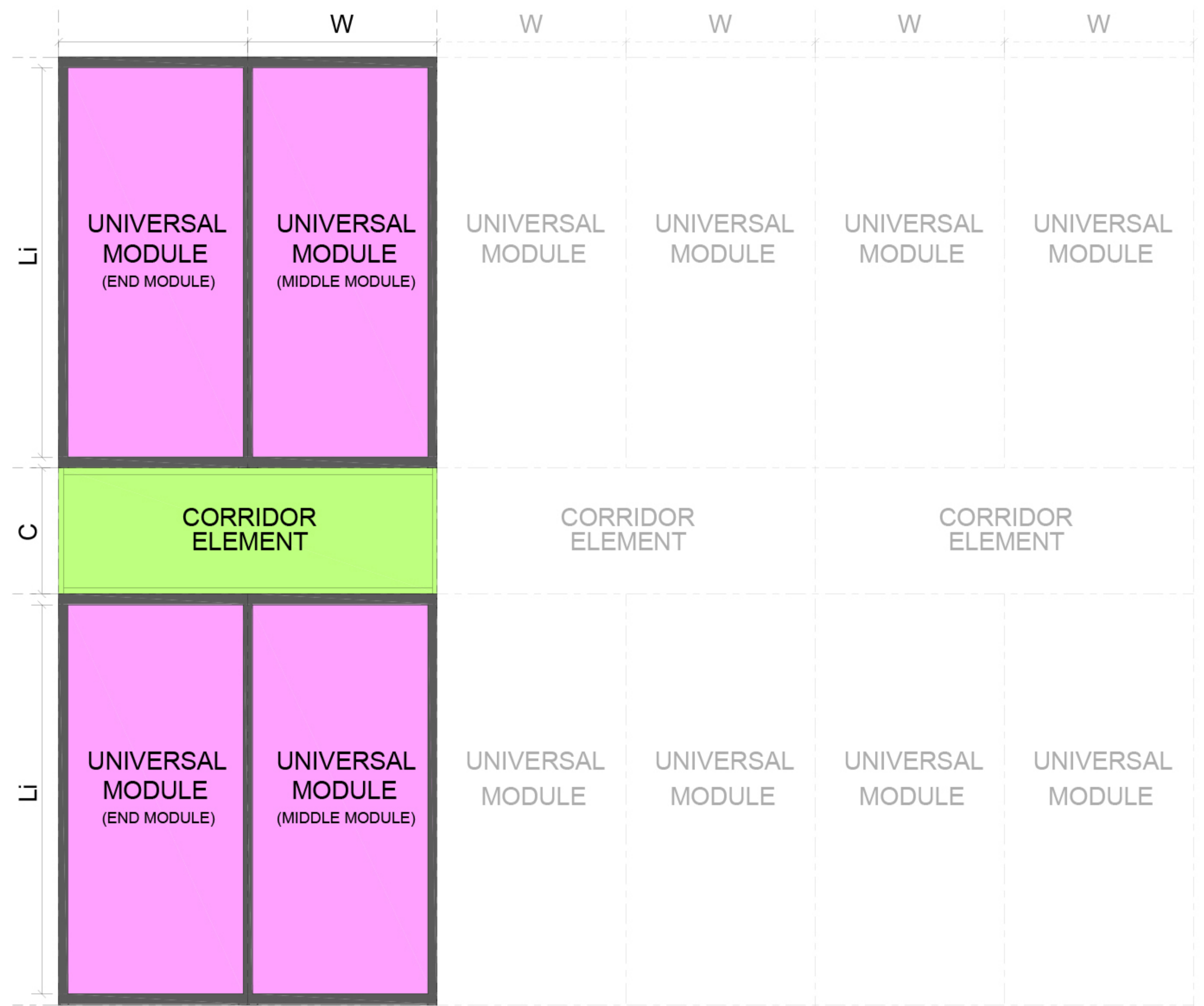


Fig. 4. **Building bloc with central corridor.**

A 2 floors building bloc should have a minimal length = 3 modules, so $\geq 3 * W$.



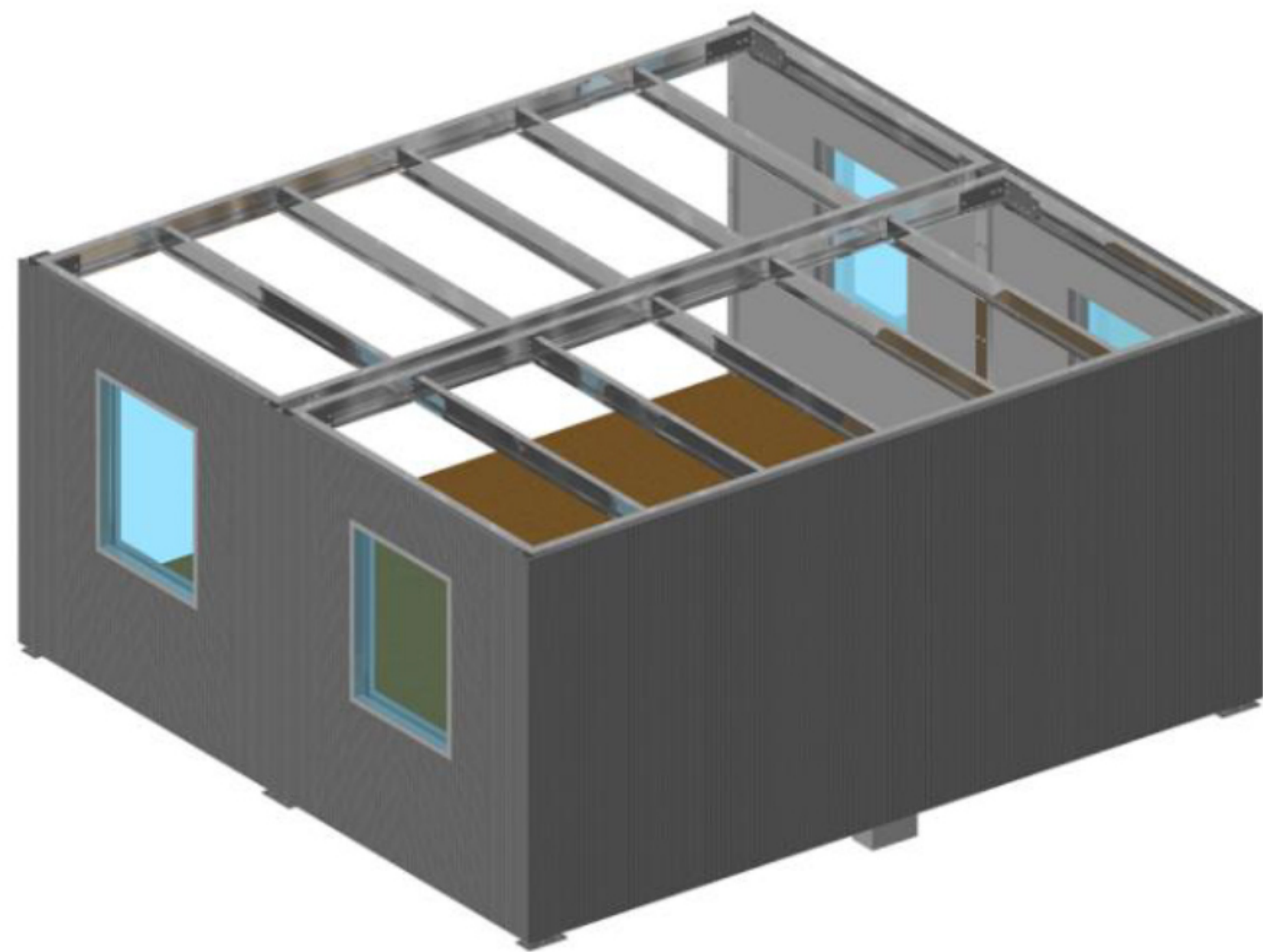
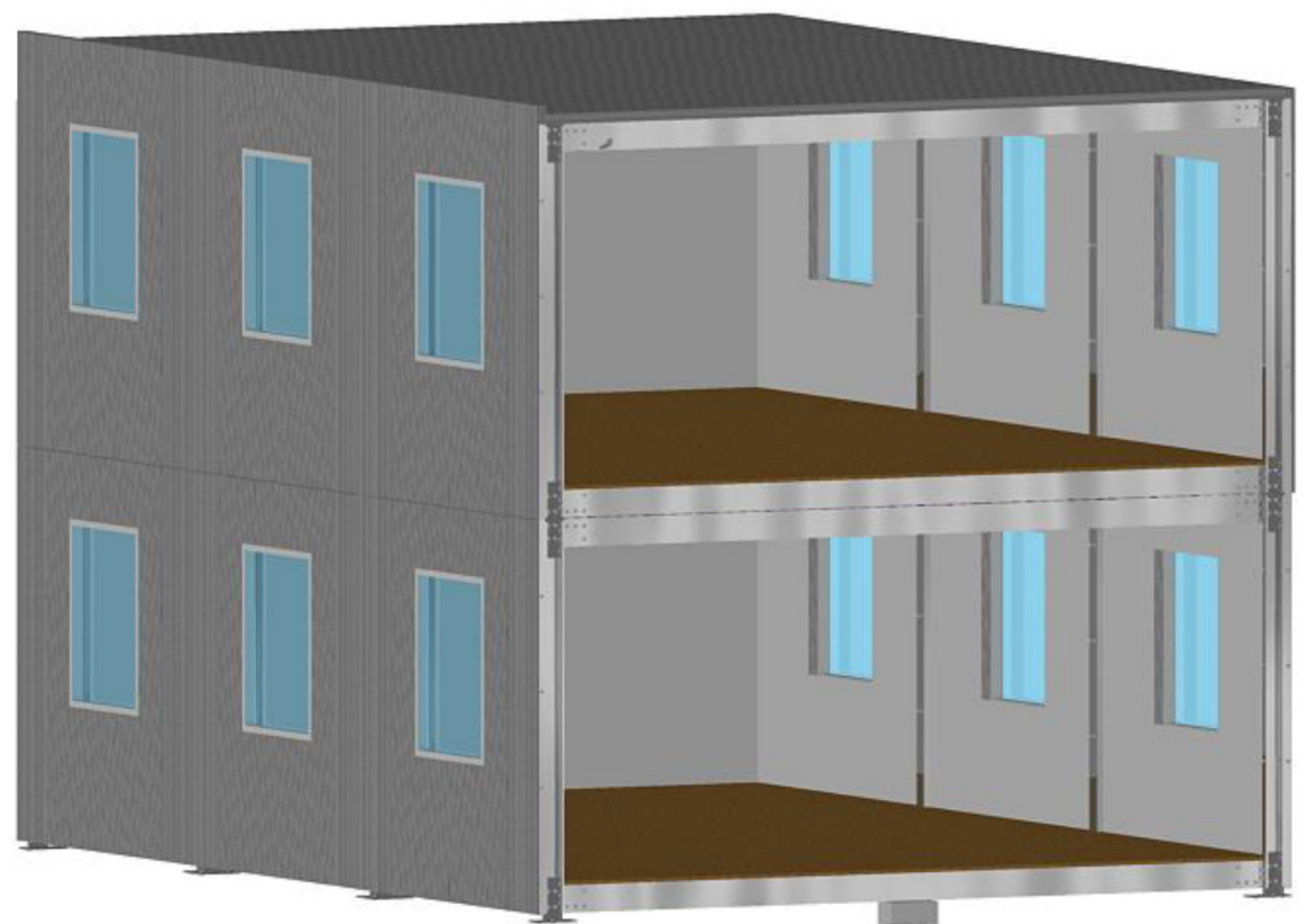


Fig. 5. **Ground-floor configuration.**



min. 3 modules long

Fig. 6. **Configuration with 2 floors.**

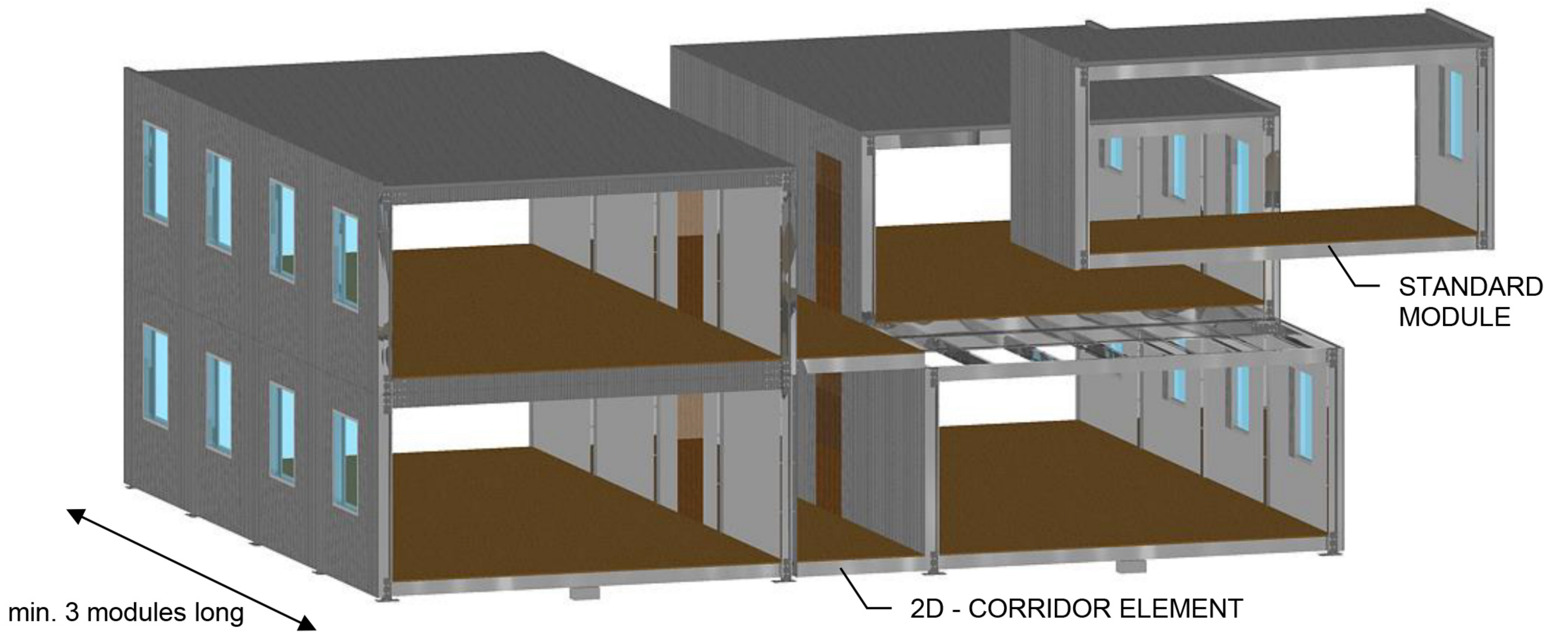


Fig. 7. **Two floors building with central corridor.**

➤ STAIRS

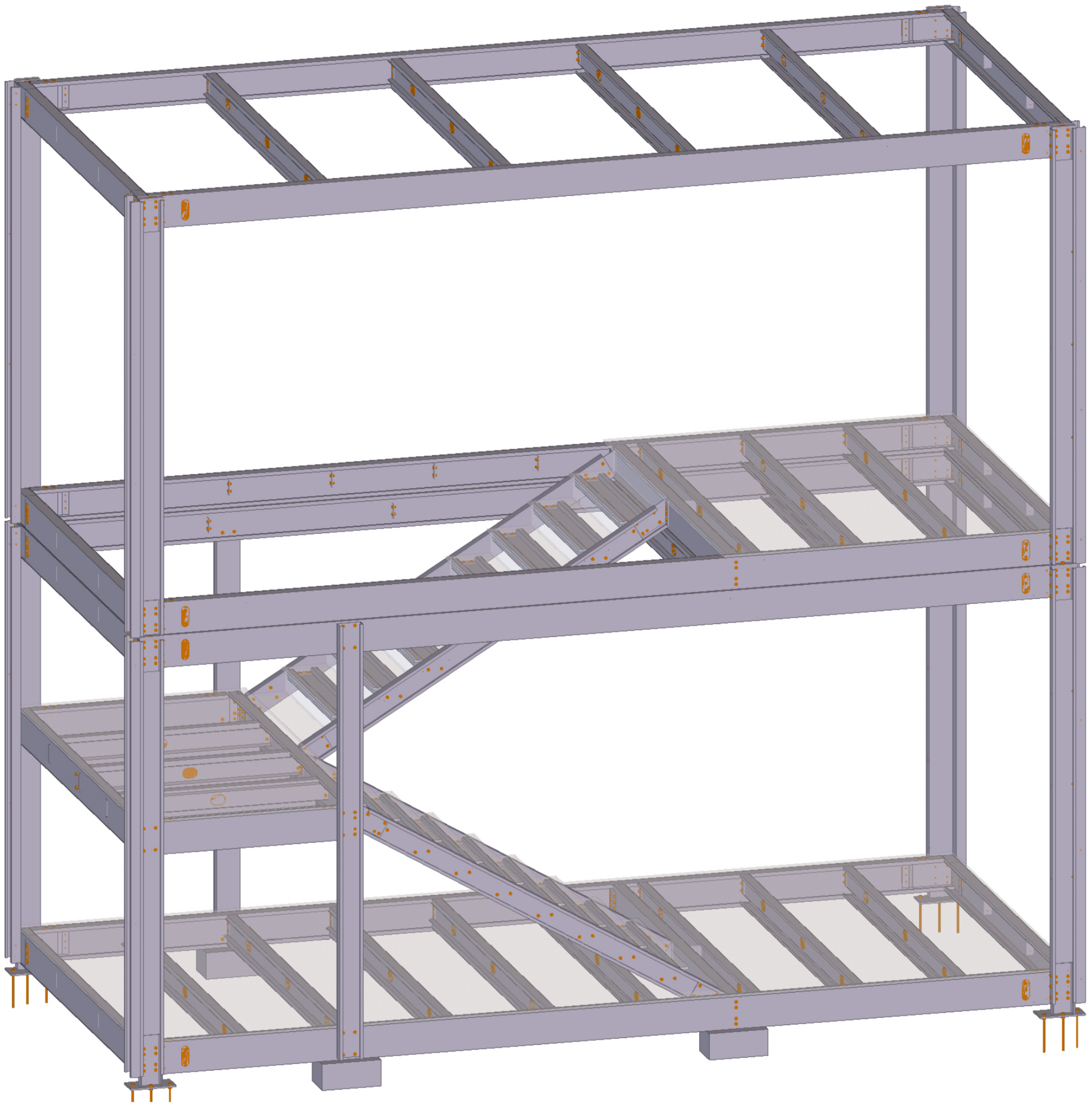


Fig. 33. **Stairs modules.**

➤ APPLICABILITY / DESIGN DATA

⇒ DEAD LOAD

» FLOOR

- » Dry floor: 50 kg/m²
- » Integrated concrete floor 60-80mm: 200 kg/m²

» CEILING: 20 kg/m² (other solution on request)

» ROOF: 30 kg/m² including ceiling (other solution on request)

» WALL ELEMENTS: 50kg/m² (other solution on request)

⇒ LIVE LOAD FLOOR: maximum of (270 kg/m²; 300 kg point load)
other solution on request

⇒ SNOW: up to 200 kg/m² (optional up to 300 kg/m²)

⇒ WIND: for building configurations as shown on page 2-3, applicable for terrain cat. III (villages, cities, forests) for:

» Belgium: whole country;

» Netherlands: for wind zone 2 and 3;

» Germany: wind zone 1, 2;

» France: for wind zone 1, 2, 3;

» Italy:

» If only ground floor (R+0) building configurations (terrain cat. III): for wind zone 1 → 7;

» R+1 (two floors building):

➤ wind zone 1 → 3 (terrain cat. III): for configurations like Fig. 3b and Fig. 4,

➤ other zones: additional vertical bracings needed in both directions.

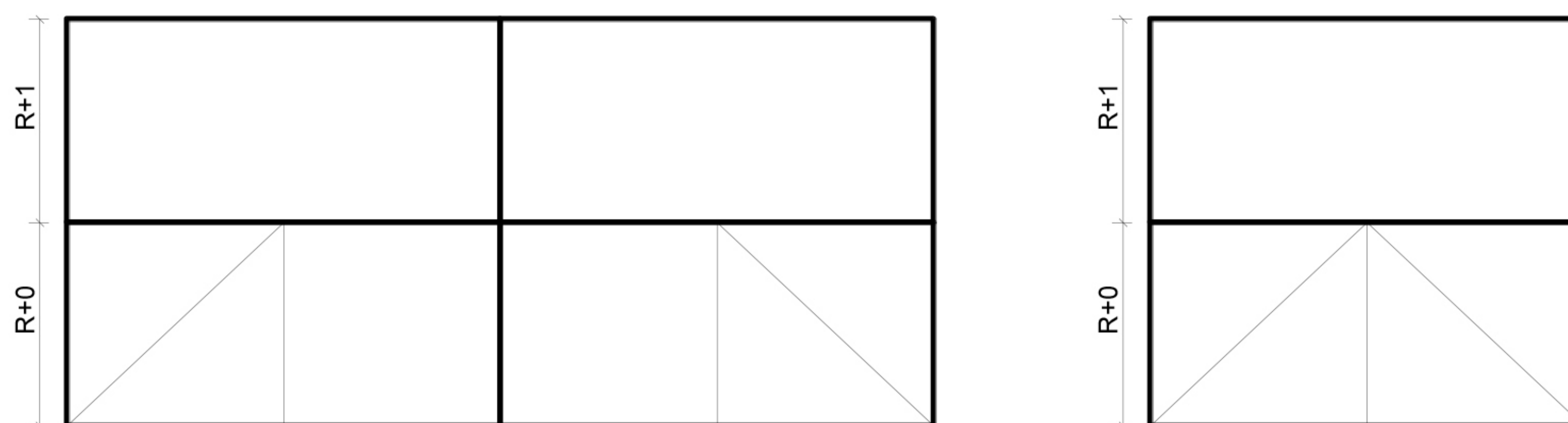


Fig. 34. Two floors building bloc.



Other configurations on request.

⇒ **DEFORMATION LIMITS:**

- » Floor: $L/400$
- » Roof: $L/250$
- » Floor and roof should be rigid in its horizontal plane, so it acts as a diaphragm.

⇒ **SEISMIC RESISTANCE:**

- » Up to 5,0 on Richter scale, e.g. for Italy for zones 3, 4;
- » For $\geq 5,0$; to be verified per project, e.g. for Italy for zones 1, 2 additional vertical bracings needed in both directions.

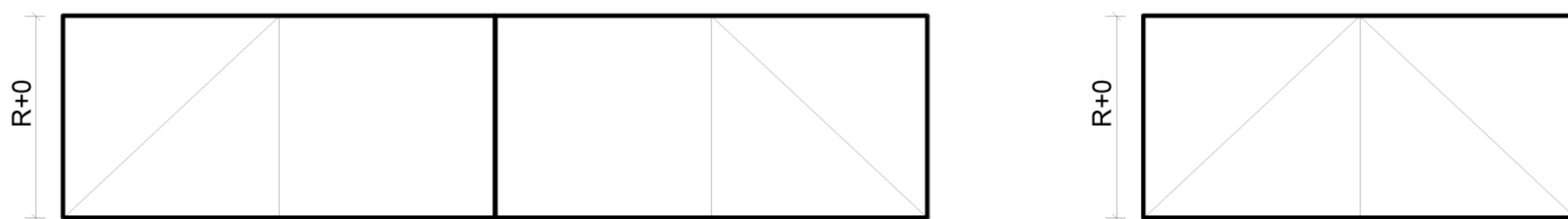


Fig. 35. **Ground floor building bloc.**

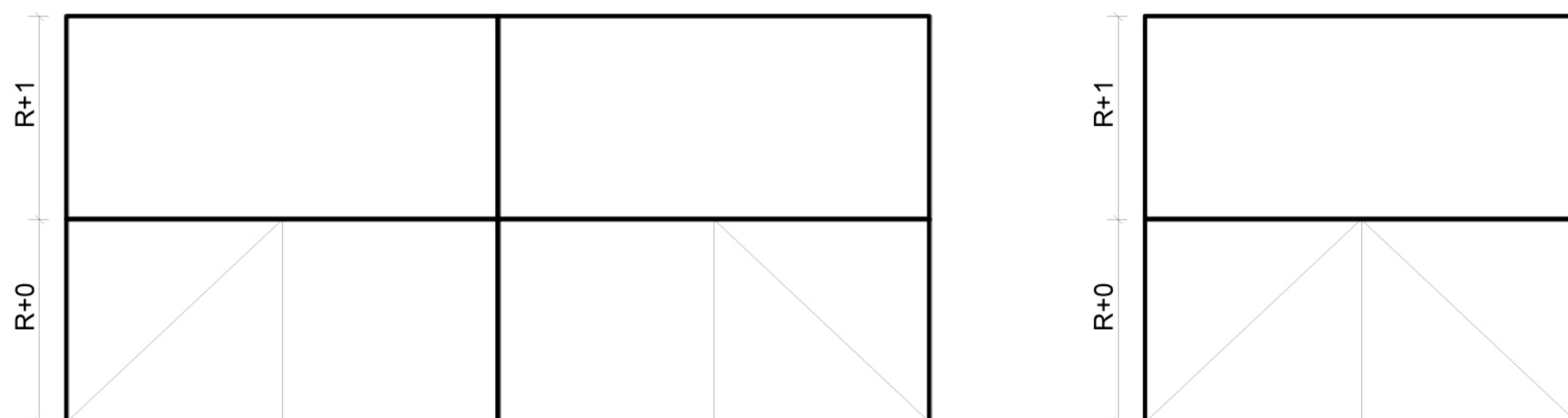


Fig. 36. **Two floors building bloc.**

⇒ **CC2 – 50 years**

➤ TRANSPORT AND MANIPULATION

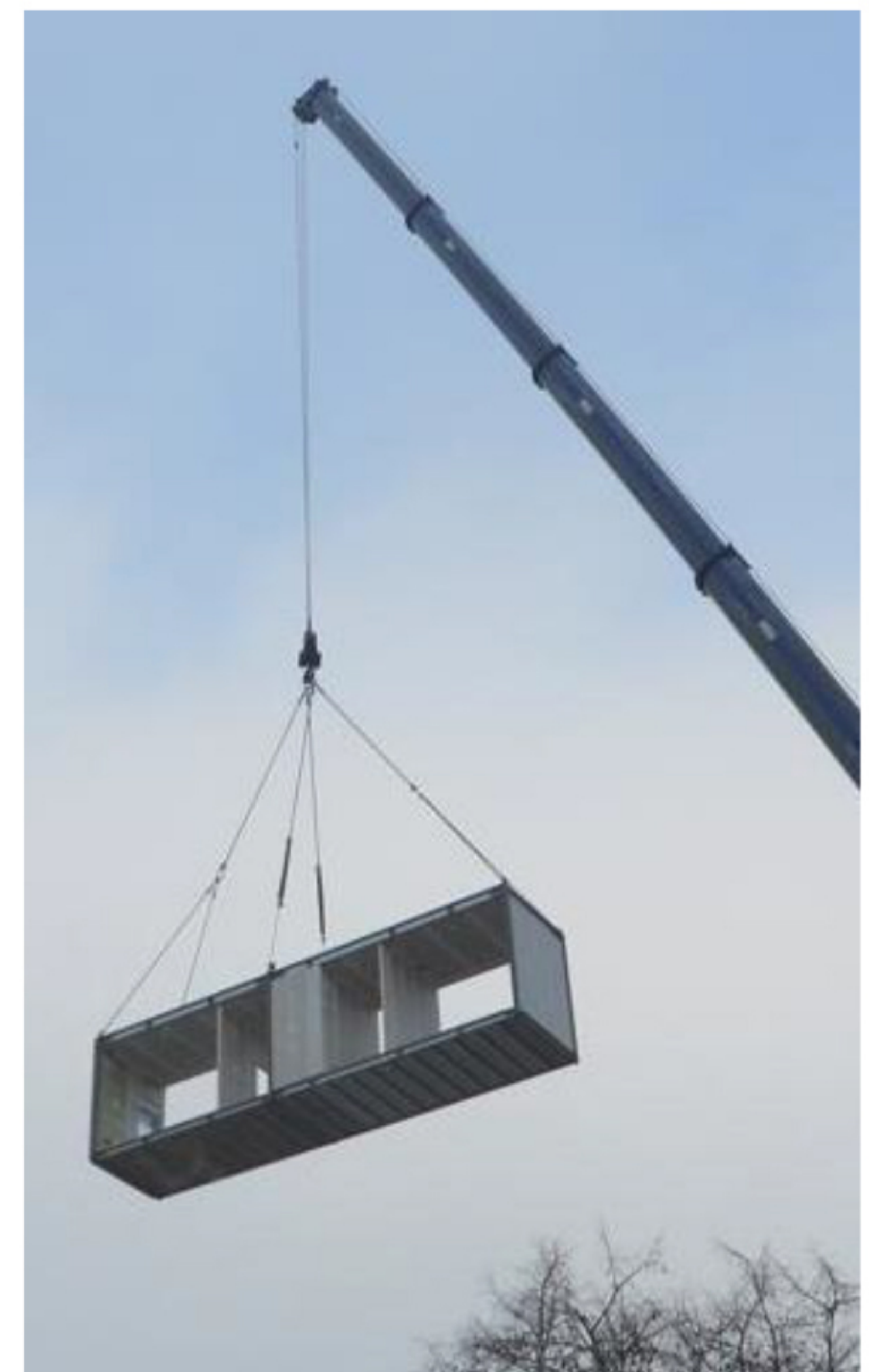
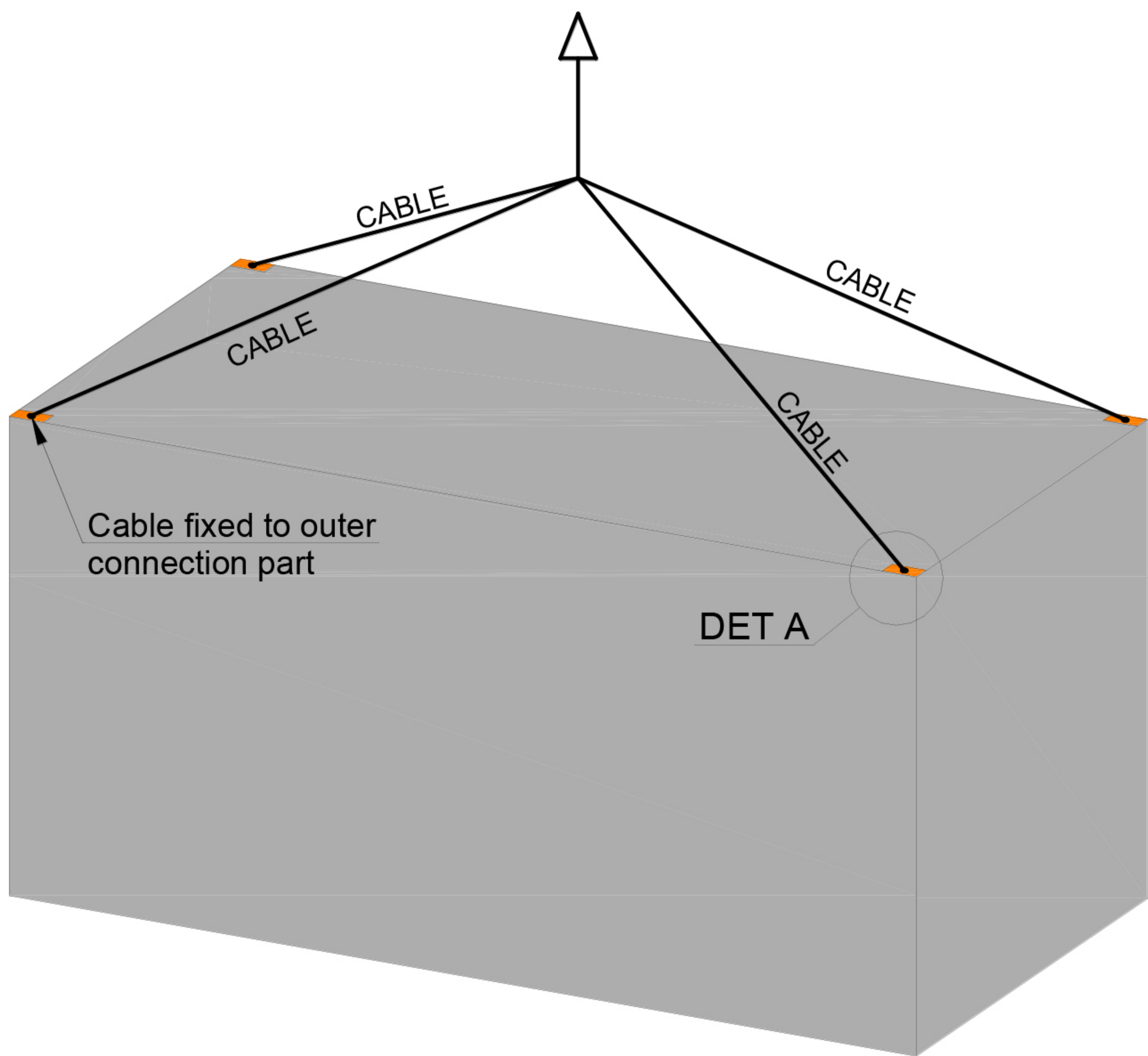


Fig. 37. **Transport/manipulation of a module.**

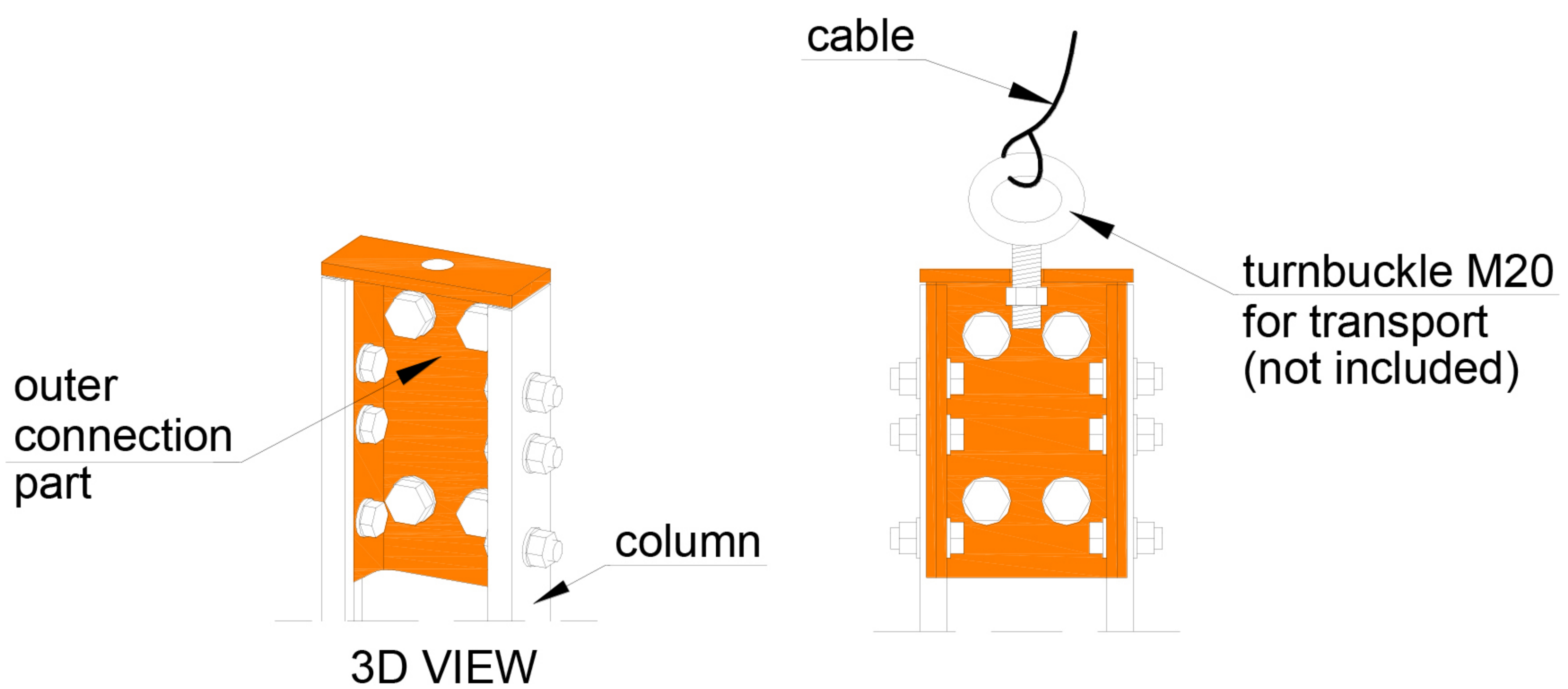


Fig. 38. **DETAIL A.**