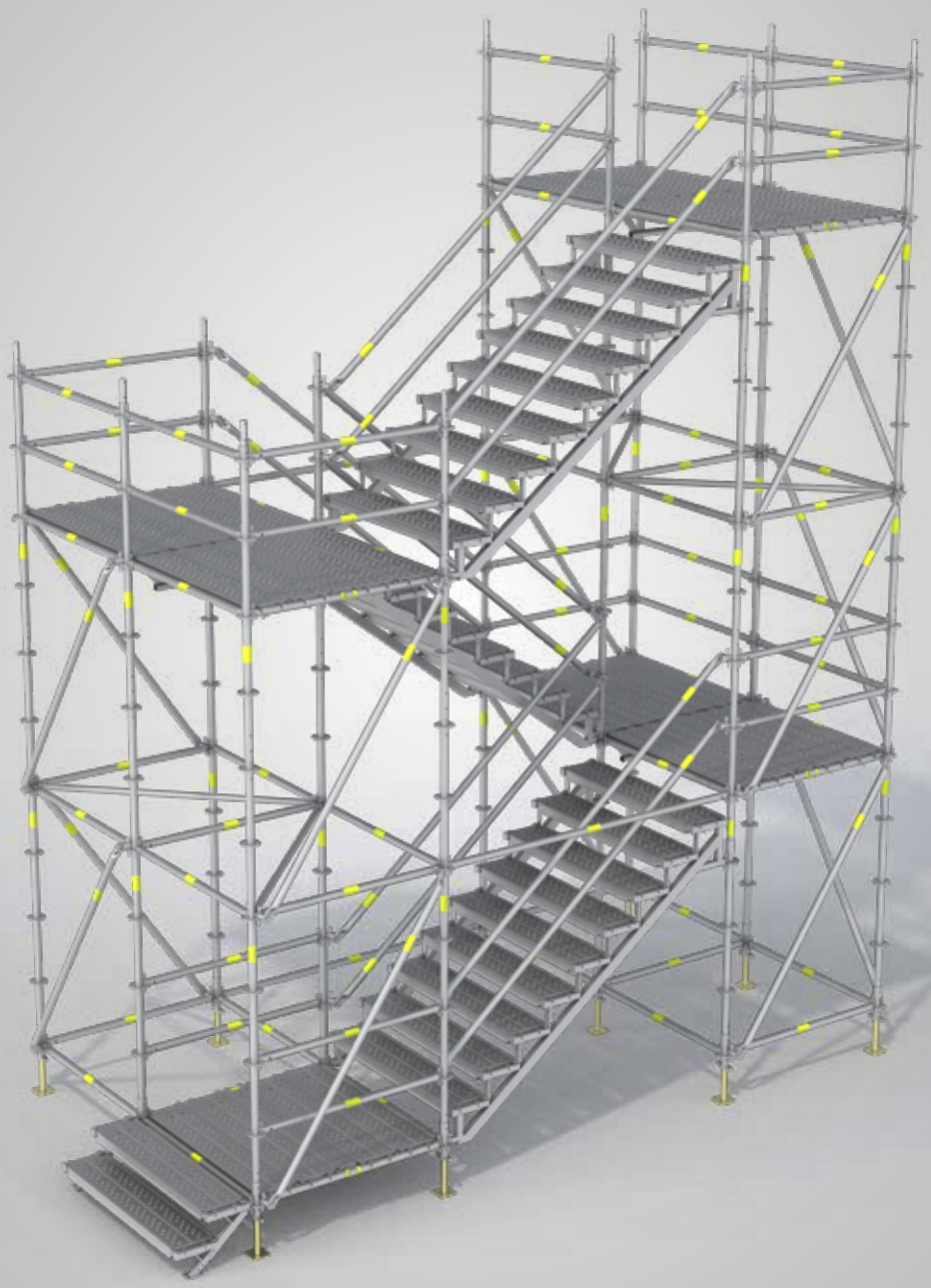
BRIO STAIR TOWERS

ACCESS STAIRS ON THE CONSTRUCTION SITE



ULMA

Introduction

BRIO **temporary ladders and stairs allow for access to construction sites,** pedestrian **movement in public spaces** and facilitate **evacuation** in case of emergency. They are essential structures on any type of construction site, whether for residential, non-residential, restoration or civil engineering works.

Their simple assembly and optimised design (reduced number of parts) allow for **greater economic returns.**

BRIO temporary accesses, based on **BRIO multi-directional scaffolding, offer all the necessary guarantees relating to safety** (façade scaffolding certified in line with **European standards EN 12810-1/2 and EN 12811-1/2/3)**, geometry solutions, stiffness and loads to be withstood. Current safety standards for **assembly, dismantling and use of the scaffolding should also be taken into account.**

The requirements of the scaffolding in terms of geometry and loads are very different depending on the scope of application and the place to be accessed.

The main **advantages** of the system are:

- Simple design, with few components. **Easy, quick assembly.**
- Guaranteed safety, **certified scaffolding.**
- **Moveable by crane.**
- Large accesses. Platform widths: 0.70 m, 1.02 m, 1.5 m and 2 m, depending on requirements.
- Possibility of **different landings.**
- **Very versatile,** suitable for multiple configurations such as ramps, platforms and public ladders. Possibility of an access tower or ladder attached to scaffolding.
- **High load-bearing capacity.**
- They comply with current standards for temporary public accesses.



BRIO Multi-Directional Scaffolding

BRIO multi-directional is **certified** façade scaffolding, **heavy-duty, stable** and **adaptable scaffolding** which provides comfortable and **secure working areas.**

It is a cost-efficient system because of its galvanised steel design, which ensures **fast, simple and intuitive assembly, with high load-bearing capacity.** This scaffolding is also very stiff and stable.

Certifications:

AENOR Producto Certificado

NF CERTIFICATION PAR AFNOR CERTIFICATION NF ÉQUIPEMENTS DE CHANTIER

Autorización Ministerial de trabajo Italiano nº:
PROT. 15/VI/12246/14.03.01.01 "BRIO 102"
PROT. 15/VI/12245/14.03.01.01 "BRIO 70"

* NF CERTIFICATION of temporary work equipment. The NF mark, managed by AFNOR, certifies the conformity with the standards EN 12810-1 and 2, EN 12811-1, 2 and 3 and with the NF096 certification document (for fixed working scaffolding made of prefabricated elements). The mark NF also ensures that there is a quality control at the factory during manufacture, which is supervised by an external laboratory.

Certifying body: AFNOR CERTIFICATION, 11, rue Francis de Pressensé, F-93571 LA PLAINE SAINT-DENIS CEDEX. Certification document: NF Work equipment (NF096) available on www.marque-nf.com

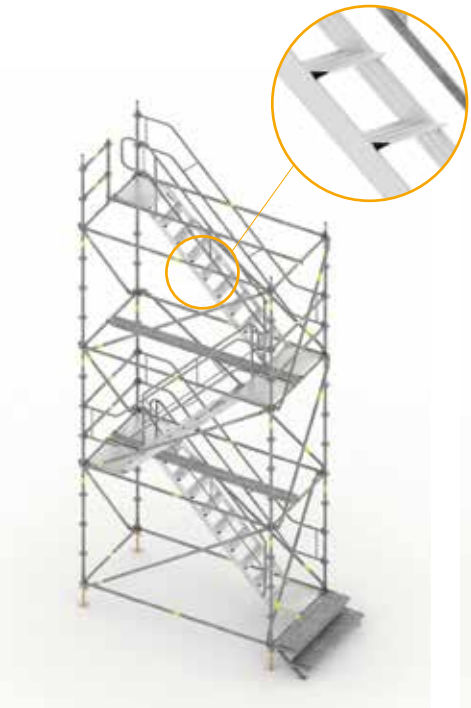
To refer to the NF mark, a scaffolding structure assembled from a certified model, for the subassemblies subject to marking, shall include only those listed in the NF parts list of the model.

BRIO ALU 70 stair tower

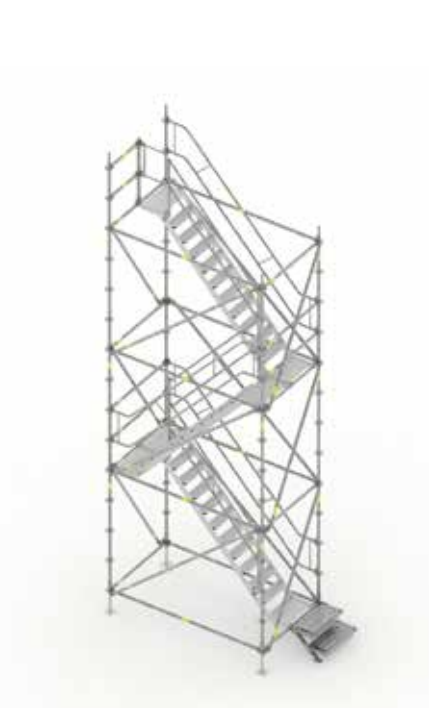
The BRIO ALU 70 STAIR TOWER has a simple design, a reduced number of components and its stringer is **made of aluminium,** which facilitates **high assembly performance.**

- **Configurations:**
  - Spans of 3 and 2.5 m
  - Width of:
    - 1.5 m (4 standards).
    - 1.4 m (6 standards).
    - 1.35 m (4 standards).

- Load-bearing capacity: 2 kN/m².
- Ideal for **simple accesses.**
- Capable of reaching **great heights.**
- It allows for **assembly of stairs attached to scaffolding.**
- Possibility of **adapting access to different heights.**
- Comfortable stair bases and landings.





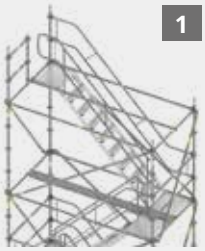


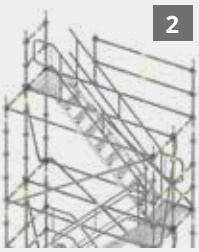
- Possibility of different landings:

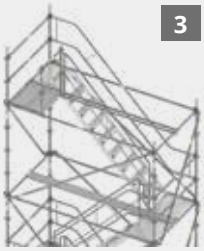
1 Front landing.

2 Short side landing.

3 Long side landing.







Specific components

Name and description		kg
Aluminium stair 3 x 2	2127711	24.6
Aluminium stair 2.5 x 2	2127705	22.4
Inner guardrail 3 x 2	2127999	15.4
Inner guardrail 2.5 x 2	2127850	12.1
Outer guardrail brio 3 x 2	2127777	17

Name and description		kg
Outer guardrail 2.5 x 2	2127845	14.5
Inner guardrail simple 3 x 2	2128137	11.5
Landing guardrail 3 x 2	2128138	3.2
Landing guardrail 2.5 x 2	2128190	3.2
Landing deck 3 x 2	2128139	7.2

BRIO 70 stair tower

The BRIO 70 STAIR TOWER is ideal for construction sites where **load requirements are greater** and, therefore, a more robust tower is needed.

- Ideal for accesses with **high load requirements:** 3 kN/m².
- Designed to be assembled on a span measuring **2 m in length and 2 m in height.**
- The standard configuration is **3.4 x 1.5 m (8 standards).**
- Possibility of reducing material, with a configuration including consoles and 4 standards.
- Possibility of different landings:
  - · Front landing.
  - · Short side landing.
  - · Long side landing.
- Large stair bases and landings.
- Height difference negotiations module formed of standard system parts (1.5 m platform) to provide access when there is significant variation between the base surface and first level.





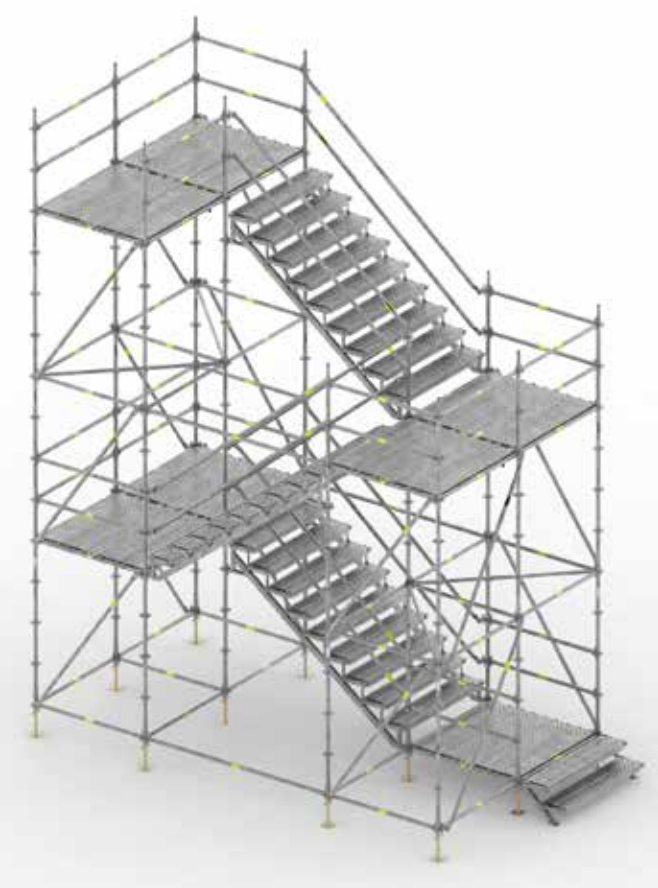
Specific components

Name and description		kg
Stair frame 2x2	2127648	27
Steel frame to generate a stair with independent steps. This is placed on a span measuring 2 m in length, allowing access every 2 m.		
Stair step G	2066959	3
Steel step to place on the 2 x 2 stair stringer to form a stair. It consists of a flat-bar grid 30 mm in thickness.		

BRIO 100/200 stair tower

The BRIO 100/200 STAIR TOWER is used to create **larger accesses**, where **there is a high rate** of transit of individuals or even for cases where the stair must be prepared **for evacuation in case of emergency on site.**

- **High load-bearing capacity:**
  - Width 1.02 m: 6 kN/m².
  - Width 1.5 m: 4.5 kN/m².
  - Width 2 m: 3 kN/m².
- Ideal for **large accesses. Widths of 1.02 m, 1.5 m and 2 m.**
- Designed to be assembled on a span measuring **2.5 m in length and 2 m in height.**
- Possibility of different landings:
  - Front landing.
  - Short side landing.
  - Long side landing.
- Possibility of **adapting the stair to an intermediate height.**
- Large, comfortable stair bases and landings.







Specific components

Name and description		kg
Stair stringer 2.5x2	2127470	29

Steel component to generate a stair with independent steps (BRIO platforms). It is placed on a span measuring 2.5 m in length, allowing access every 2 m.

Public staircase and footbridge

PUBLIC STAIRCASES AND FOOTBRIDGES are **temporary structures** which provide **spaces for safe pedestrian transit on public roads.**



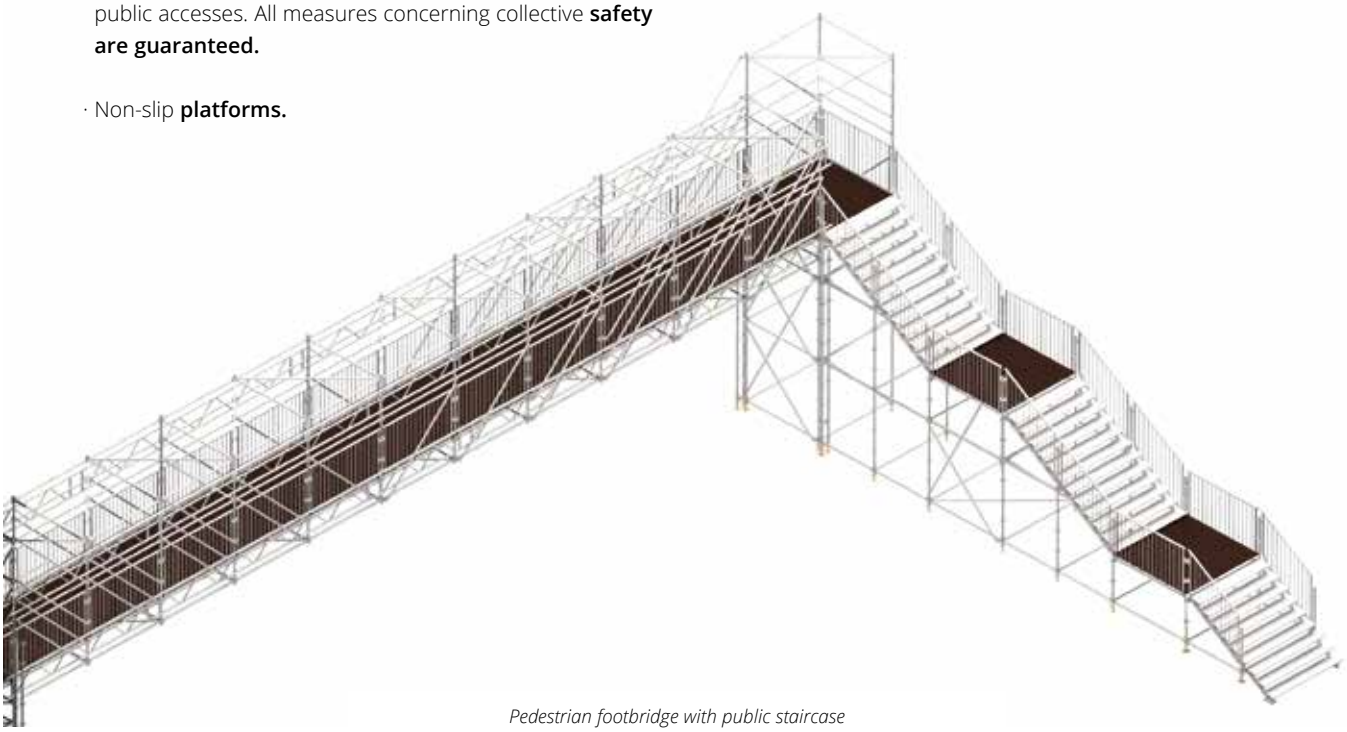
Large staircases for pedestrian access

Public staircase

- Load-bearing capacity, up to 7.5 kN/m^2.
- Guaranteed safety:
  - Complies with the most stringent temporary public access provisions. All measures concerning collective **safety are guaranteed.**
  - Safety guardrails, platforms and **non-slip steps.**
- **Versatile system.** Suitable for multiple configurations, depending on transit of individuals, access height, geometry and load requirements.

Footbridge

- Load-bearing capacity, up to 5 kN/m^2.
- Guaranteed safety:
  - Complies with the most stringent provisions for temporary public accesses. All measures concerning collective **safety are guaranteed.**
  - Non-slip **platforms.**



Pedestrian footbridge with public staircase

Trapdoor platforms

The TRAPDOOR PLATFORMS allows for movement through the scaffolding's interior between different levels, without leaving gaps between platforms. They include their own aluminium ladder.

- Platform with built-in aluminum ladder:
  - · aluminum trapdoor with steel structure
  - · wooden trapdoor with aluminium structure.

- Load-bearing capacity: 2 kN/m²; 3 kN/m²; 4.5 kN/m² and 6 kN/m², depending on width.
- **Wide range:** 1.02 m; 1.5 m; 2 m; 2.5 m and 3 m.
- Ideal for creating **accesses through the interior of scaffolding.**
- **Guaranteed safety.** The trapdoor closes automatically to prevent gaps.





Projects



Bridge over the river Barrow, New Ross, Ireland



Hisgaura cable-stayed bridge, Colombia. Aluminium stair tower measuring 142 m





Skawa Pylon, Poland



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