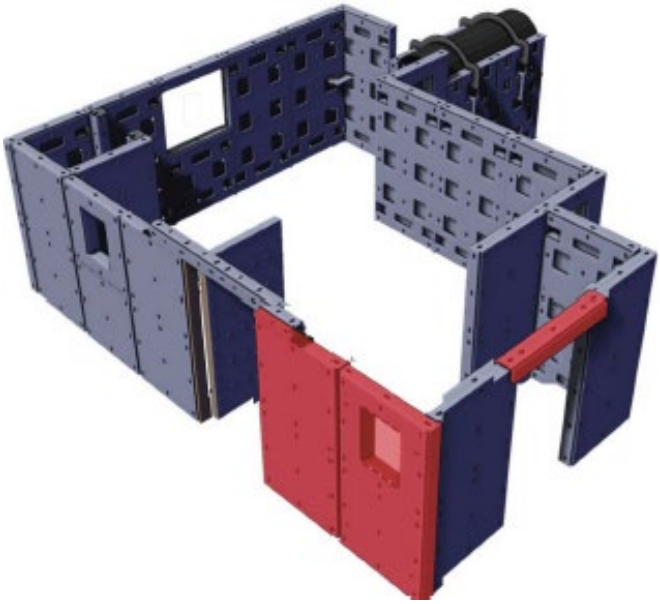
Assembling Modular Structures

Instruction Manual

TRANGO SYSTEMS

MODULAR TRAINING INFRASTRUCTURE



List of Components

Wall

WALL 200

Window

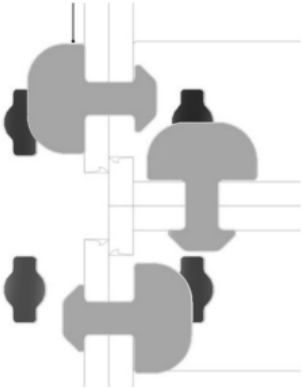
WINDOW 200

Beam

BEAM 100

Connector Key for units' connection

Keys distribution:
6 keys per meter of structure



Minimum number of walls: 2

Walls connection method:
insert the key and give it a half turn

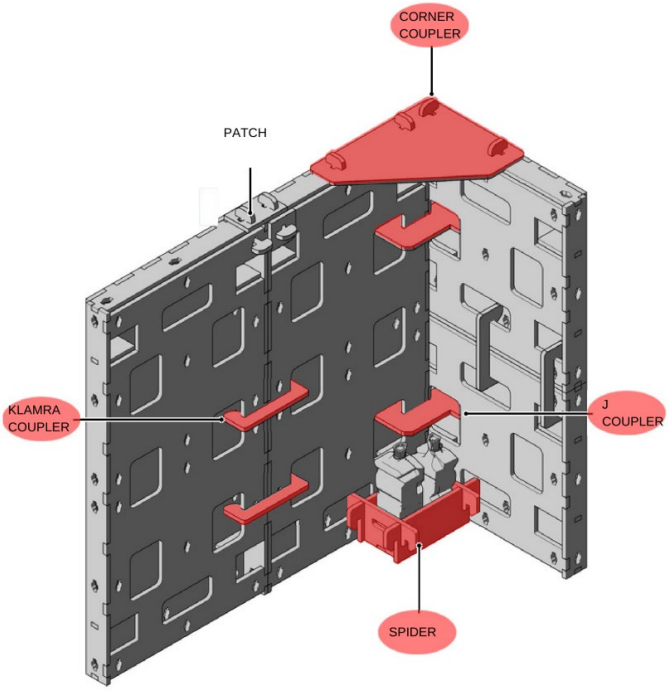
90-degree connection

This is the basic first connection.
We will use it in a variety of T and L configurations, either standing or lying, to create a single cover or start assembling the structure.
In stand-alone covers, a support should be placed opposite to the wind direction and the trainee's direction of action for better stability and resistance.

180-degree connection

This connection serves as an extension of the structure nodes. No more than 5 components may be connected without adding nodes.

Stabilizing elements



Remember!

A reinforced and stabilized corner is a guarantee for the structure’s stability.

Stabilizing elements

Remember!

The corner should always be connected with 4 keys.

Three reasons for structure reinforcement

We strive to perform the minimum amount of work necessary to prepare for effective training. Along with that, let's make sure to properly strengthen the structure. Also, we'll remain alert to changes and developments.

1. Training Duration

Brief, dynamic training sessions minimize the requirement for reinforcement, unlike setups designed for extended training spanning hours, days, or months. The latter demand a more comprehensive and specialized application of stability and reinforcement elements.

2. Training Intensity

Instructional or technical training for an individual trainee is usually gentle, while an intense training for a group or platoon, conducted under physical strain, requires additional reinforcement at critical points, including significant doors, strategic corners or windows.

3. Environmental and weather conditions

In structured and well-organized areas, minimal reinforcements are required, unlike in uneven terrains. The force and direction of the wind will affect the strength and positioning of the reinforcements and supports.

In any case, not less than two keys.
The reinforcements must be applied at the end of the initial setup.

Preliminary arrangements

1. Terrain

Conduct a terrain assessment for the facility setup location. While not obligatory, it's preferable to select the most level ground available. Sharp objects and metal should be cleared to ensure the safety of personnel and equipment. In extreme scenarios, provision of digging tools may be necessary.

2. Wind

Assess wind conditions and strength, following the "umbrella rule": if it's uncomfortable to walk outside with an umbrella due to the wind, then the construction will require extra diligence. Wind direction will influence the positioning of angles, entrances, and windows, which should be arranged to minimize wind resistance as much as possible and to ensure stability even under harsher conditions.

3. Stabilization & Weights

When required, consider using available stabilizing equipment and weights, including sandbags, interlocking stones, stone-filled bars, digging tools, etc. Also, positioning the structure next to strong existing anchors in the area may be an option.

Equipment maintenance

1. Mechanical Damages

Metal and heavy or sharp object may cause tears and damage to the equipment.

2. Separating Walls

After its initial assembly, it is not recommended to separate the single module back into individual walls. This wears down the teeth of the walls and creates structural instability. If needed, the structure can be reinforced by securing the modules with pins.

3. Improper Storage

Panelo (the material of which all the equipment is made) is fully water-resistant. However, improper storage or haphazard stacking can cause harm. This also applies for the equipment transportation.

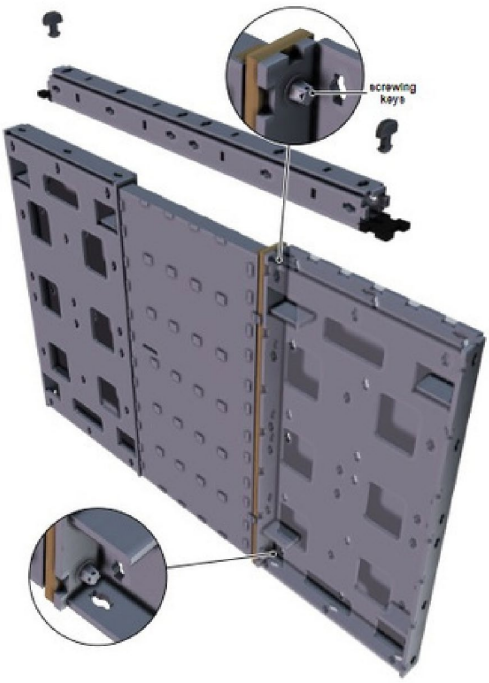
Equipment maintenance

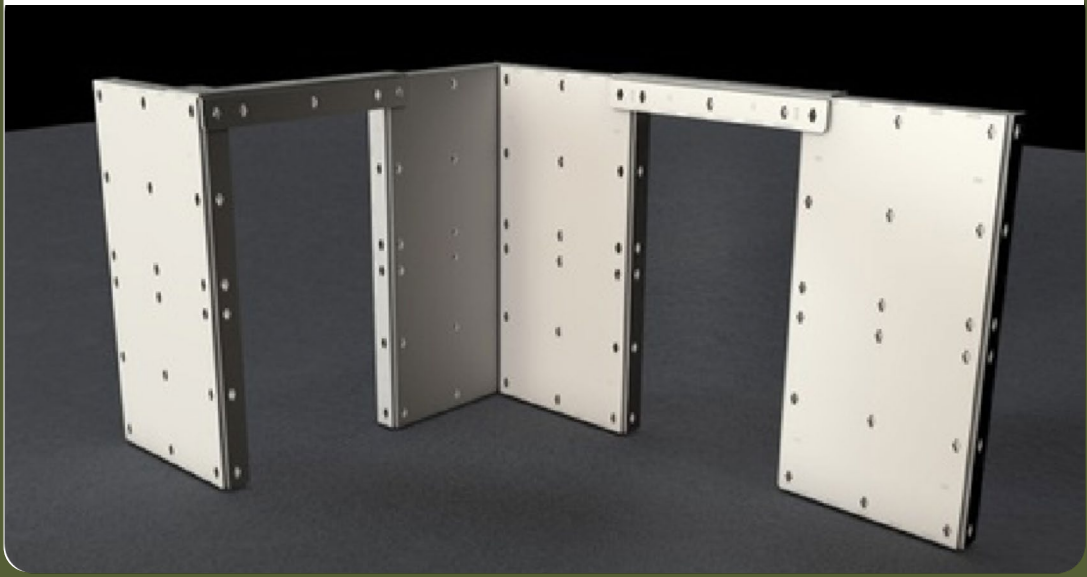
Proper Storage

4. Target Baseline

Shooting at connection areas from close range or holding a hot barrel against the structure causes damage to the material. Note: Visual damage is not the same as functional damage; damaged walls can still serve their purpose even in a combat environment. Furthermore, while it's not a safety issue, it still constitutes a professional mishap for the trainee.

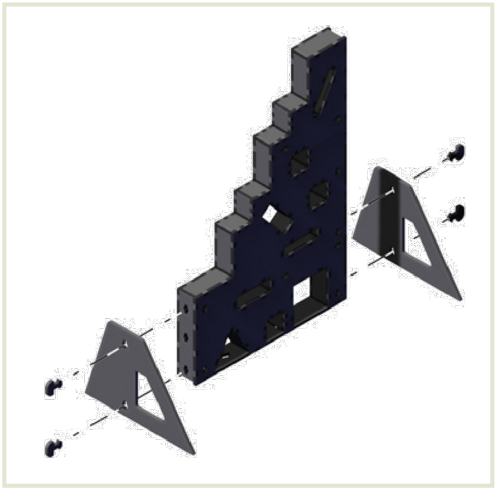
Opening

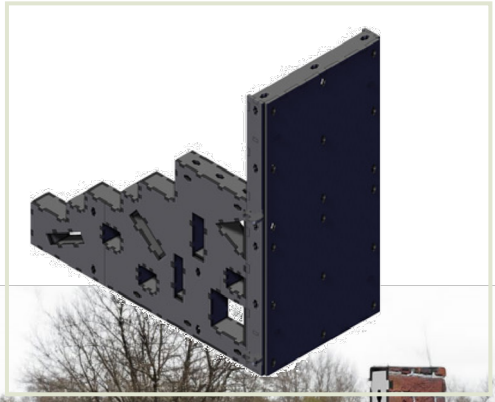


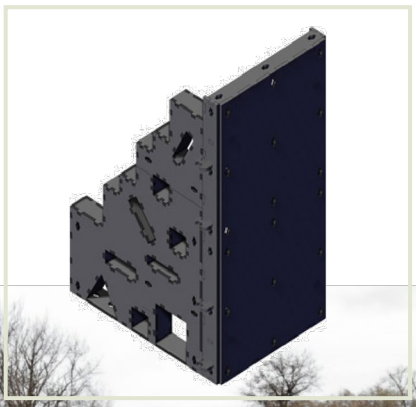


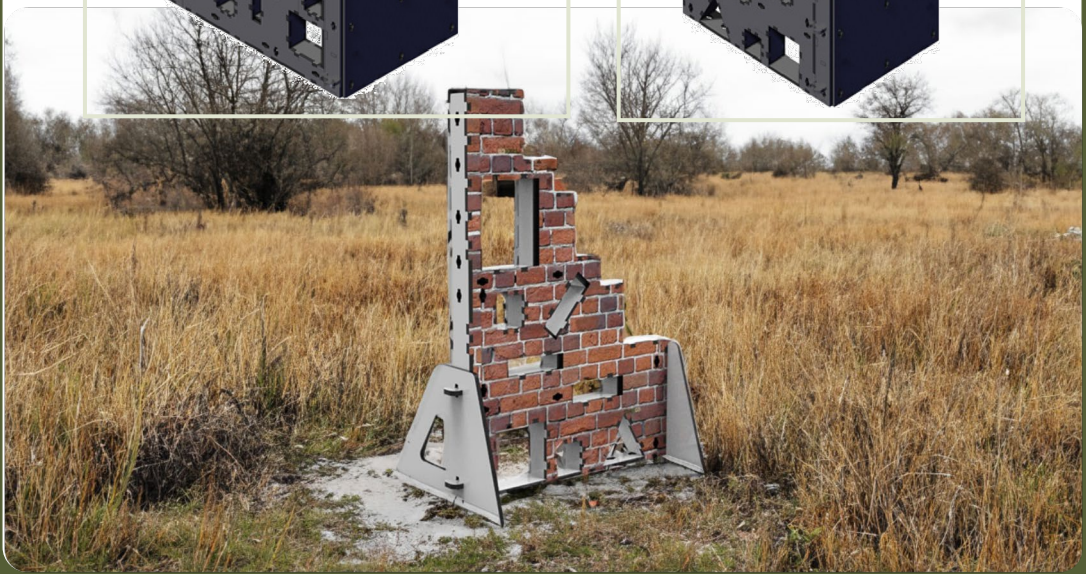
Barricades

Barricade





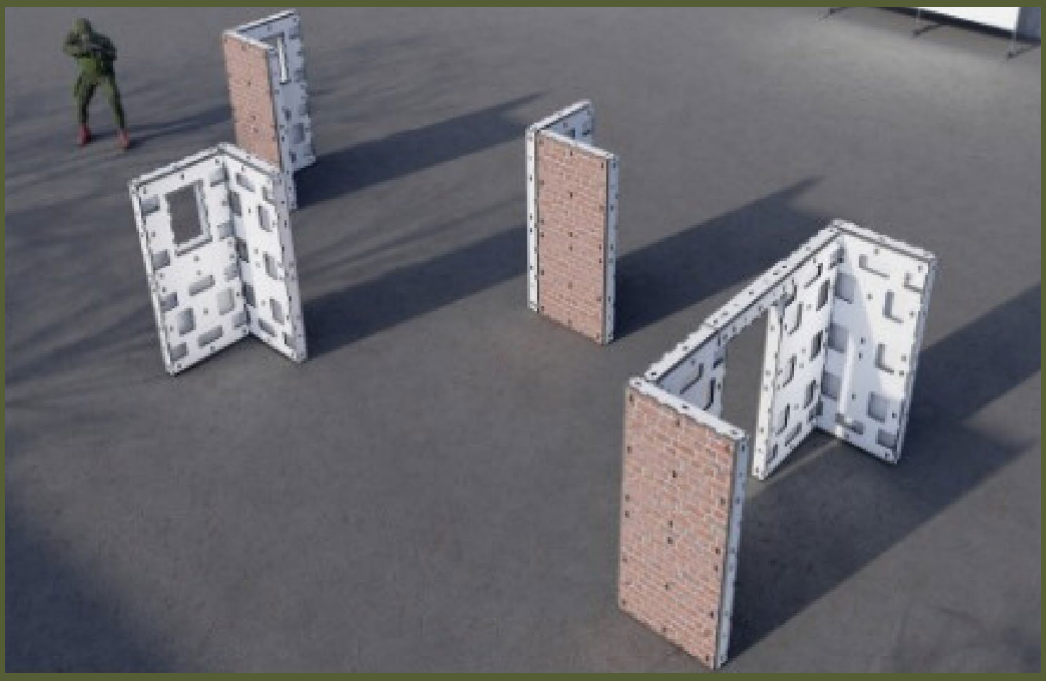




SWAT Street Combat Training | Basic Kit

רכיב	כמות
Wall 200	X8
Window 200	X2
Beam 100	X2
Spider	X2
Corner	X2
J-Hook	X8
Key	x50

It’s recommended to integrate Barricade with this setup.



Shoot House| Basic Kit

רכיב	כמות
Wall 200	X16
Window 200	X3
Door	X1
Beam 100	X3
Beam 200	X1
Spider	X4
Corner	X4
J-Hook	X12
Klamra	X24
Patch	X8
Window Cover	X3

Shoot House| Advanced Kit

רכיב	כמות
Wall 200	X24
Window 200	X5
Door	X1
Beam 100	X5
Beam 200	X1
Spider	X6
Corner	X6
J-Hook	X18
Klamra	X36
Patch	X12
Window Cover	X5

Situating the Structure within the Range

The evaluation of the structure placement in advance is important. However, even after the structure is built, it can be relocated in its reinforced configuration, although a sufficient manpower will be required.

1. Safety Perimeter

The structure must be positioned correctly in relation to the safety perimeter to allow as wide an opening as possible for work inside or on the structure.

2. Wind

In open ranges, expect variable wind zones and tunnels. Monitor their locations closely. Note that air flow may change during training; adjustments and reinforcements may be necessary accordingly.

3. Concurrent Use

To carry out concurrent use in the range (e.g., technical firing and shelter firing), position the structure at the end of or at the entrance to the range, allowing transition between the trainings without interfering with the structure.

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In the last year, we've gathered extensive feedback on our product's impact on training and mission success, both locally and globally. Our products are widely used across the country, each utilized to meet specific needs. We're eager to hear your thoughts. Please share your insights on our product's strengths and areas for improvement.

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