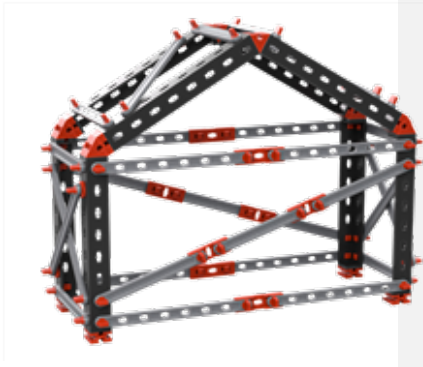


Model 11
Half-timbered house



Date

Name

Class

CONSTRUCTION TASK

Construct the half-timbered house according to the building instructions.

THEMATIC TASK

In practice, half-timbered structures are usually not two-dimensional, but rather three-dimensional. This can be clearly seen in hall construction, where half-timbered structures can still be seen in their pure form today. This model shows an example of how the supporting structure of a warehouse can be constructed.

Use the triangle method to determine in advance whether this model is statically determined. To do this, consider the side surfaces individually as flat half-timberings.

Estimation using the triangle method

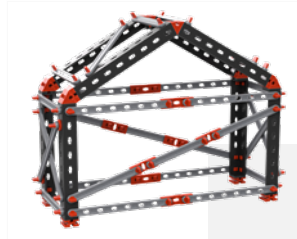
1. Front/rear:

2. Roof surface right/left:

3. Right/left side



EXPERIMENTAL TASK



Date

Name

Class

1. Now remove the roof structure and apply light pressure to the model with your hand and describe your impression of its stability.

2. Remove one strut from the cross bracing on each side panel and press diagonally on the corners of the side panel frames.

What do you observe about the previous experiment with the side surfaces?

