

Cocoon lightweight steel profiles

Factsheet for the use as load-bearing components

The Cocoon system is characterized by simplicity. Galvanized C and U lightweight steel profiles are the backbone of the system. The profiles are joined to frames, insulated and covered with sheathing on site or in the factory (prefabrication) according to individual requirements.

The lightweight steel profiles form the core of a multi-layered structure. Insulation is provided according to fire, sound and thermal requirements. The applied sheathing provides adequate stability and bracing to the building. Additional layers can be applied in order to meet other requirements.

In this way, structures for interior walls, exterior walls, separation walls, floors, roofs, large span ceilings (e.g. as an acoustic measure) or other special components can be defined and optimized.

One specific feature of the lightweight steel construction system is that, in contrast to the "standard" drywall construction, it is designed to carry loads. For this reason, structural design is also necessary, and the profiles are manufactured according to steel construction regulations: EN 1090. Structural design is carried out based on EN 1993-1-3.

Warning!

Profiles for non-load-bearing metal stud walls such as UA-profiles are manufactured based on the standard EN 14195: "Metal framing components for gypsum board systems".

The scope of this standard is limited to non-load-bearing systems such as: partition walls, wall and ceiling cladding, ceilings with mechanically fastened plates as well as cladding of beams, columns, channels and shafts.

Profiles manufactured for non-load-bearing systems may not be used for load-bearing purposes!