

Dehumidification is mainly applied to dry out excess water content in materials in connection with construction work.

In case of drying out a newly constructed building you should also keep air change low, but the most important parameter to consider is the water content in the various materials used. Often you have to meet a deadline, you have to consider a time to complete the works.

DRYING OUT THE BUILDINGS DURING CONSTRUCTION

Formerly construction work on an average building went on for 6-9 months and the building materials were usually dried out by natural ventilation by the time the building was finished. Today, however, construction work is very efficient and much faster. This means that dehumidification is required to remove the excess water in the various building materials before the building can be occupied.

When selecting a dehumidifier for drying out a building you need to consider how much water should be removed, ambient temperature and how much time you have for it.

This is actually quite a difficult task. In some cases it is possible to estimate the amount of water in the building materials from tables. Please note that in regards to drying out a newly constructed building it all comes down to the specific building materials used for walls, floors and roofs. The water content of various building materials differ so much that a simple rule of thumb is unworkable.



Humidity control during construction, DEH-900i

WATER CONTENT IN BUILDING MATERIALS (KG / M³)

Building material	Before Dehumidification	Water chemically bound	After Dehumidification (desired condition)	Water to be dehumidified
Wood	80	-	40	40
Tile, roof	10	-	10	0
Brick, wall	80	-	10	70
Lightweight concrete	100-200	-	20	80-180
Concrete K 15 II	180	42	38	100
Concrete K 25 II	180	57	46	77
Concrete K 40 II	180	71	51	58