



4: would be in the case where the heating system has no extra capacity to compensate for evaporative cooling effect – Humidity level would be 45 % relative, but temperature would drop to 11,5 C°

1: Outdoor conditions winter season average
 ● - 10 C at 70 % relative humidity
 ● Water content g/kg 1,2

2: Indoors heated up to 18 C, humidity level drops to 10 % Relative
 ● Water content g/kg 1,2

3: Wanted humidity level at indoor temperature: 45 % relative humidity
 ● Water content g/kg required at 18 C, 5,8

Water supplement required to reach 5,8 g/kg (5,8 – 1,2) = 4,6 g/kg air

This is based on the heating system being able to compensate for the heat loss from the evaporation effect – 0,7 kWh heat loss, per liter of water evaporated.

Psychrometric chart by Mollier
 Barometric pressure 1013 hPa, altitude 0 m