Accelerated Drying

Achieve overnight drying and stay ahead of schedule.

Polygon Climate Control supports construction projects with desiccant dehumidification and real-time monitoring to maintain the low relative humidity needed for overnight joint compound. As humidity drops, drying time also drops. Since additional joint compound coats can't be applied until fully dry, and paint can peel on wet surfaces, maintaining proper conditions helps avoid delays and rework.

The following chart outlines expected drying times for joint compound applied under paper tape:

RH	0°C	4°C	10°C	16°C	21°C	27°C	32°C	38°C
98%	53 D	38 D	26 D	18 D	12 D	9 D	6 D	4.5 D
97%	37 D	26 D	18 D	12 D	9 D	6 D	4.5 D	3.25 D
96%	28 D	21 D	14 D	10 D	7 D	5 D	3.5 D	2.5 D
95%	25 D	17 D	12 D	8 D	6 D	4 D	2.75 D	2 D
94%	20 D	14 D	10 D	7 D	5 D	3.25 D	2.25 D	41 H
93%	18 D	12.5 D	9 D	6 D	4 D	2.75 D	2 D	36 H
92%	15 D	11 D	8 D	5 D	3.5 D	2.5 D	44 H	32 H
91%	14 D	10 D	7 D	4.75 D	3.25 D	2.25 D	40 H	29 H
90%	13 D	9 D	6 D	4.25 D	3 D	49 H	36 H	26 H
85%	10 D	6 D	4 D	3 D	2 D	34 H	25 H	18 H
80%	7 D	4.75 D	3.25 D	2.25 D	38 H	27 H	19 H	14 H
70%	4.5 D	3.5 D	2.25 D	38 H	26 H	19 H	14 H	10 H
60%	3.5 D	2.5 D	42 H	29 H	20 H	14 H	10 H	8 H
50%	3 D	2 D	36 H	24 H	17 H	12 H	9 H	6 H
40%	2.5 D	44 H	29 H	20 H	14 H	10 H	7 H	5 H
30%	2.25 D	38 H	26 H	18 H	12 H	9 H	6 H	4.5 H
20%	2 D	34 H	23 H	16 H	11 H	8 H	5.5 H	4 H
10%	42 H	30 H	21 H	14 H	10 H	7 H	5 H	3.5 H
0%	38 H	28 H	19 H	13 H	9 H	6 H	4.5 H	3 H

RH = Relative Humidity - D = Days - H = Hours

Area outlined in red represents best drying conditions.

Read how the Northwest Wall and Ceiling Bureau supports the use of Polygon Climate Control's desiccant dehumidification and remote monitoring on construction sites: https://www.wconline.com/articles/95779-tools-to-control-interior-conditions-during-construction

Sources:

https://nwcb.connectedcommunity.org/viewdocument/300-103-gypsum-wallboard-and-winter

POLYGON
CLIMATE CONTROL

EXACTAIRE IOT TECHNOLOGY



Real-time data for smarter drying

Polygon Climate Control connected devices monitor ambient temperature, humidity, dew point, and surface conditions during drywall installation. Real-time data helps track conditions, trigger alerts, and guide ExactAire smart controllers to maintain optimal interior drying environments.

CONTACT US

To discuss drying solutions for your next project

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