

# Accelerated Drying

## Achieve overnight drying and stay ahead of schedule

Polygon 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	32°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
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 blue represents best drying conditions.

Read how the Northwest Wall and Ceiling Bureau supports the use of Polygon'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>



## EXACTAIRE IOT TECHNOLOGY



### Real-time data for smarter drying

Polygon 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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