Gyp. Wallboard
300-103
3/01

Gypsum Wallboard and Winter Weather

Cold, damp weather contributes to joint bond failure, delayed shrinkage, ridging, nail pops, joint flashing, and board sagging. Proper temperature and humidity levels (environmental conditions) are important factors in achieving satisfactory results.

The following recommendations will minimize problems:

- Some sources of temporary heat will cause high humidity. The NWCB recommends a dessicant dehumidification system for best results in joint finishing and final decoration of gypsum wallboard.
- Joint treatment should not begin until a minimum temperature of 50 degrees F (10°C) can be maintained for 24 hours prior to, during, and continuously there after.
- When temporary heat is used, the temperature shall not exceed 95 degrees F (35°C) in any room or area.
- Suitable ventilation must be supplied to insure *drying* condition.
- Setting type compounds can be helpful in cold weather applications, but should not be applied in temperatures below 45 degrees F (7°C).
- Each coat must be completely dry before the application of additional coats.

The following chart provides expected drying times for a normal thickness of joint compound under a 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 (24 hours) • H=Hours								

Area highlighted in green represents BEST DRYING ENVELOPE

NORTHWEST WALL AND CEILING BUREAU
TOLL FREE (800) 524-4215

1032-A N.E. 65TH STREET
SEATTLE, WA 98115
PHONE (206) 524-4243
FAX (206) 524-4136

4846 N.E. 102ND
PORTLAND, OR 97220
TEL (503) 295-0333
FAX (503) 295-2733

E-MAIL: tech@nwcb.org
www.nwcb.org