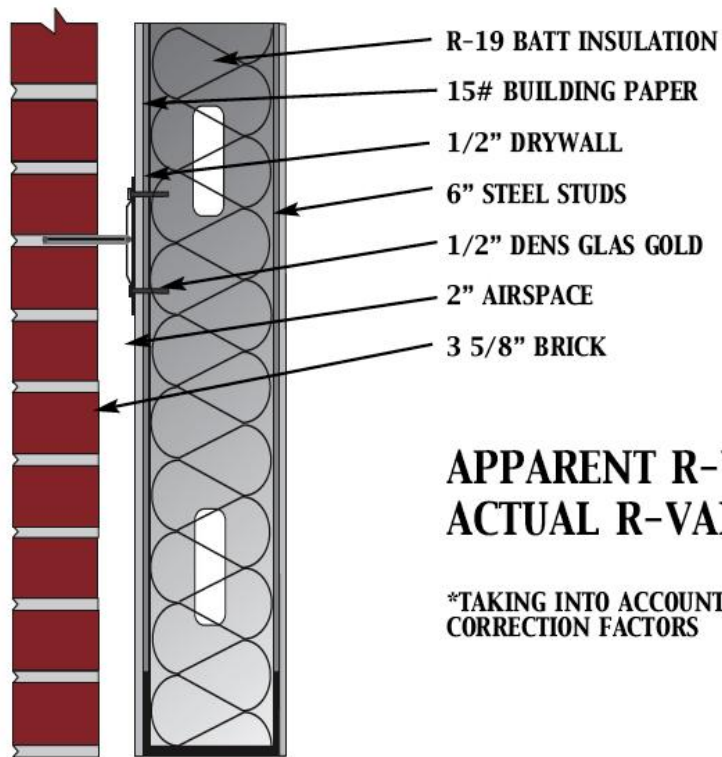


Masonry Dew Points



TYPICAL VENEER WALL DEW POINT ANALYSIS

BRICK VENEER / STEEL STUD WALL (PRIOR TO 8/02 CSI ARTICLE)



APPARENT R-VALUE → ABOUT 22.27

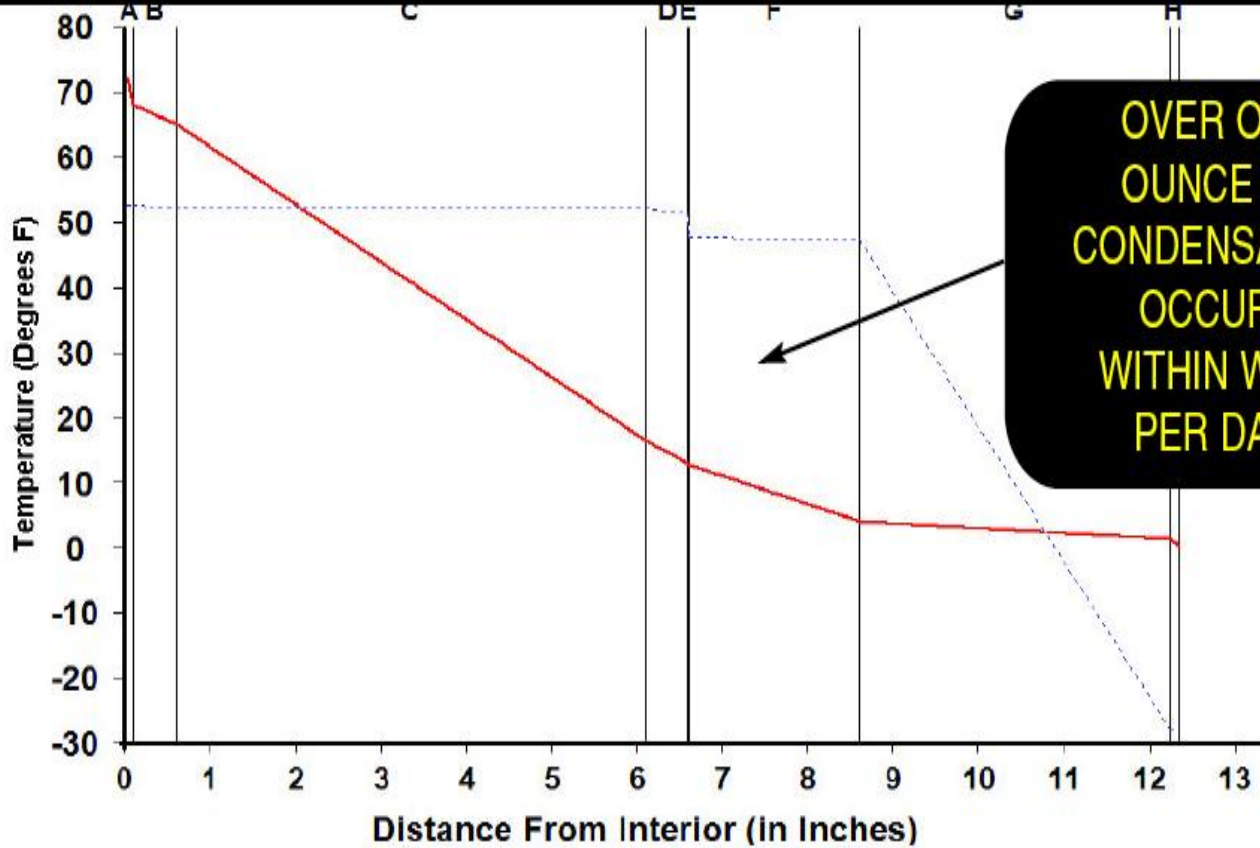
ACTUAL R-VALUE* → 10.88

*TAKING INTO ACCOUNT STEEL STUD THERMAL SHORTING AND ASHRAE 90.1 CORRECTION FACTORS



Dewpoint Analysis - Dow Chemical

Type III Wall



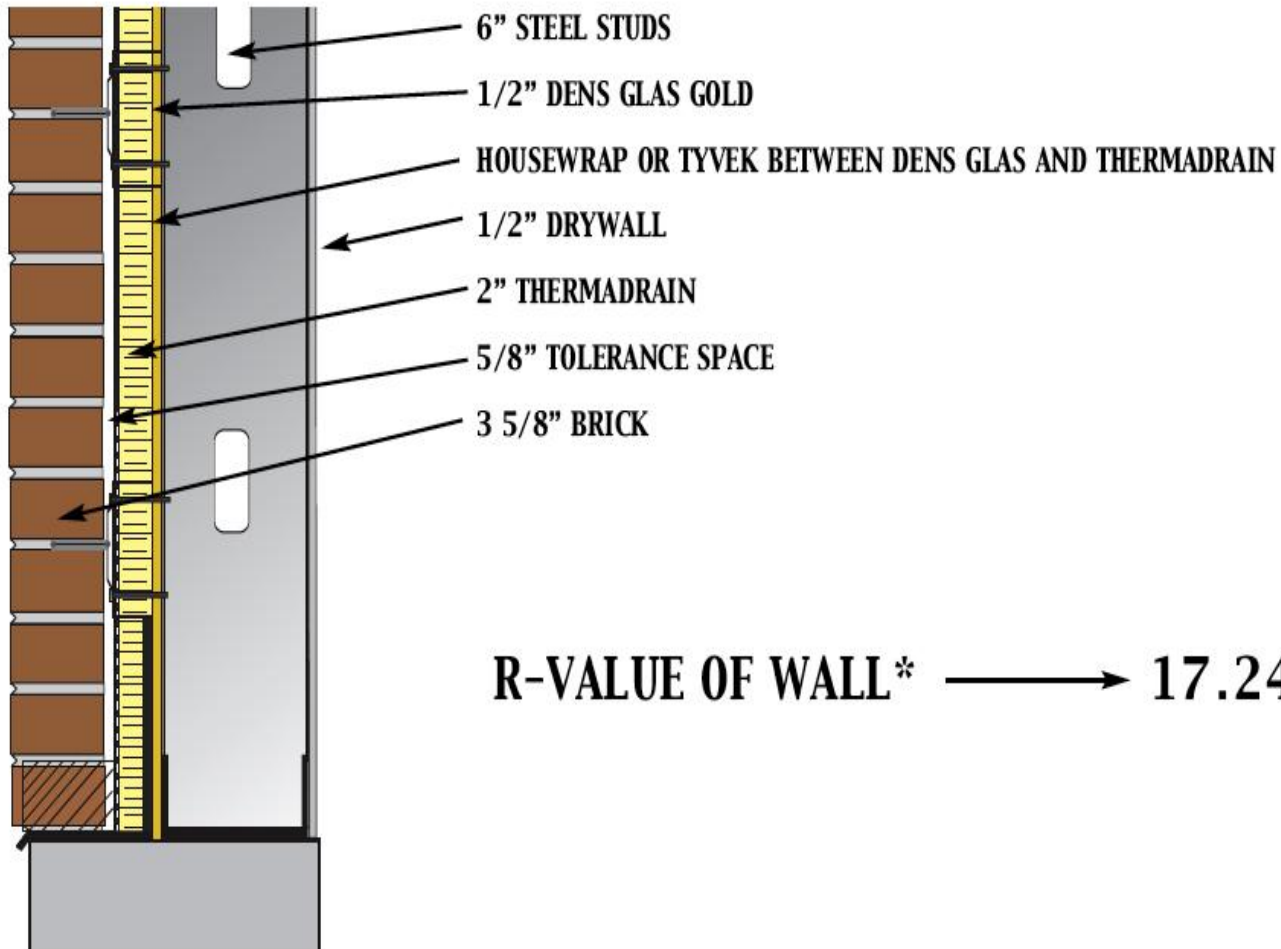
OVER ONE OUNCE OF CONDENSATION OCCURS WITHIN WALL PER DAY!

Legend	
—	Actual Temperature
·····	Dewpoint Temperature

Dewpoint Theory predicts condensation in a system at any point where the actual and dewpoint temperature lines cross.

	Conditions:	
	Interior	Exterior
Temperature	72.0	0.0
Humidity	50.0	20.0

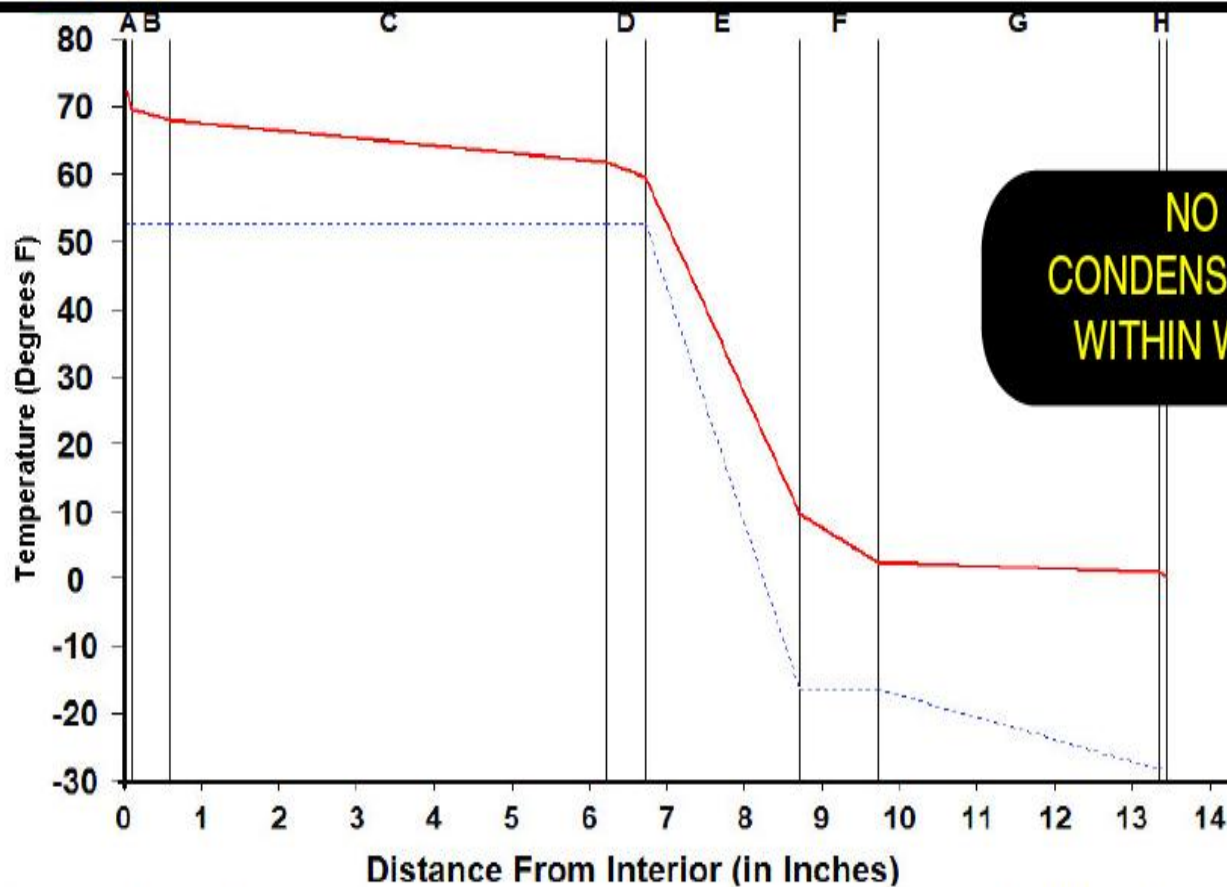
BRICK VENEER / THERMADRAIN / STEEL STUD WALL





Dewpoint Analysis - Dow Chemical

Type II Wall



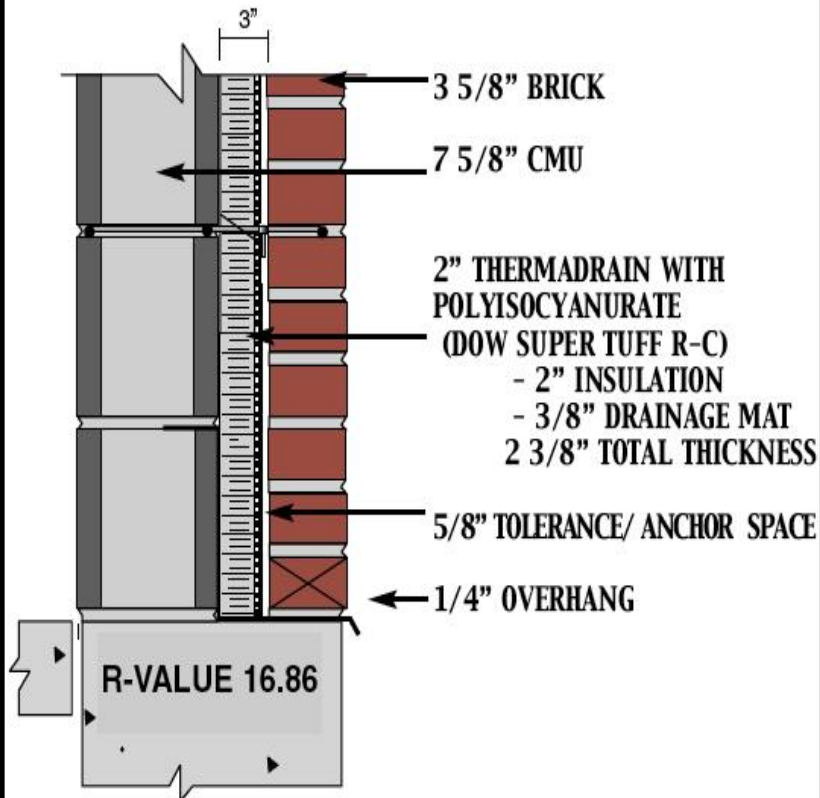
**NO
CONDENSATION
WITHIN WALL**

Legend	
—	Actual Temperature
.....	Dewpoint Temperature

Dewpoint Theory predicts condensation in a system at any point where the actual and dewpoint temperature lines cross.

Conditions:		
	Interior	Exterior
Temperature	72.0	0.0
Humidity	50.0	20.0

Insulated Cavity Wall



- R-VALUE OF WALL USING THERMADRAIN

WITH DOW TUFF R-C

1 1/2" - 13.66

2" - 16.86

2 1/2" - 19.66

- R-VALUE OF WALL USING THERMADRAIN

WITH DOW ST 11.36

1 1/2" - 13.86

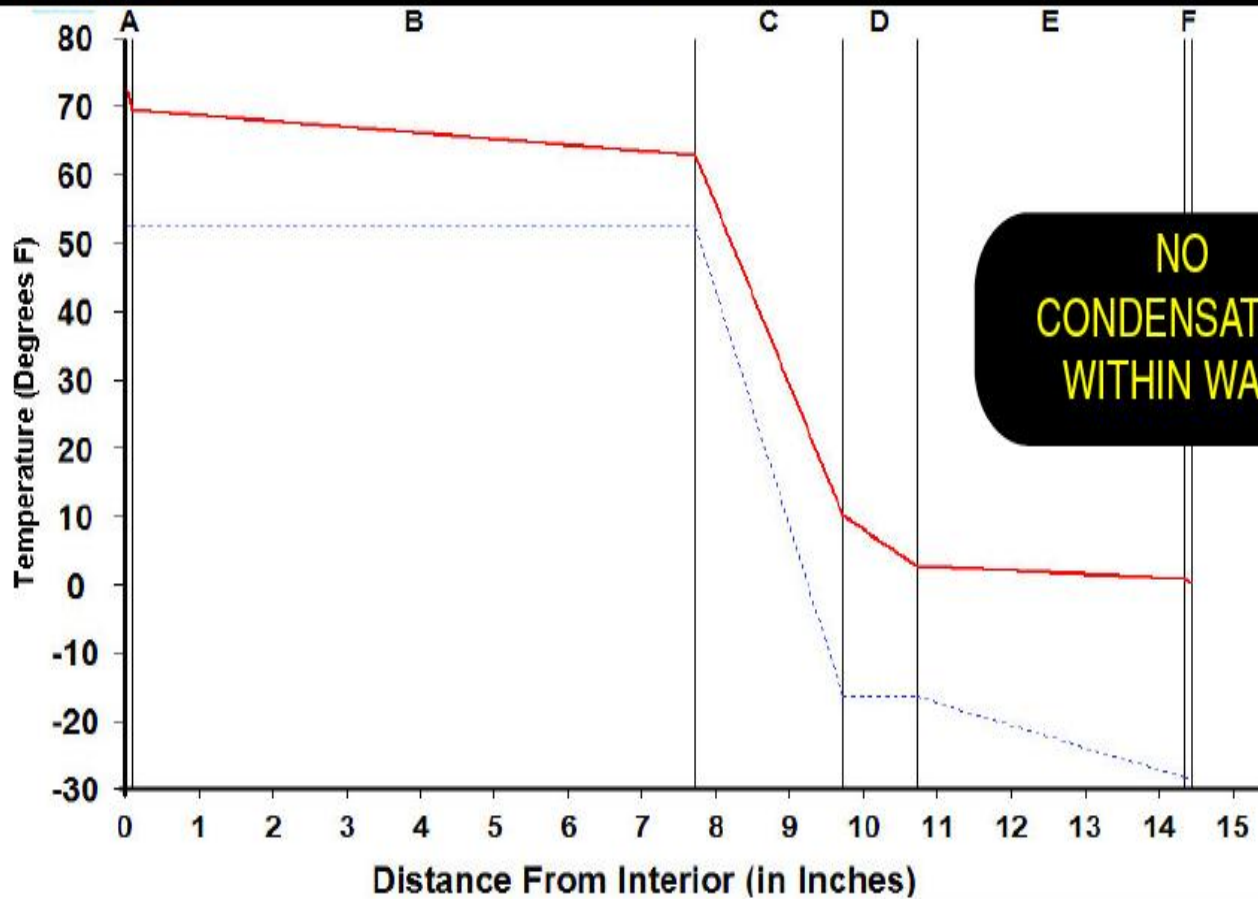
2" - 16.36

2 1/2" - 15.70



Dewpoint Analysis - Dow Chemical

Type I Wall



**NO
CONDENSATION
WITHIN WALL**

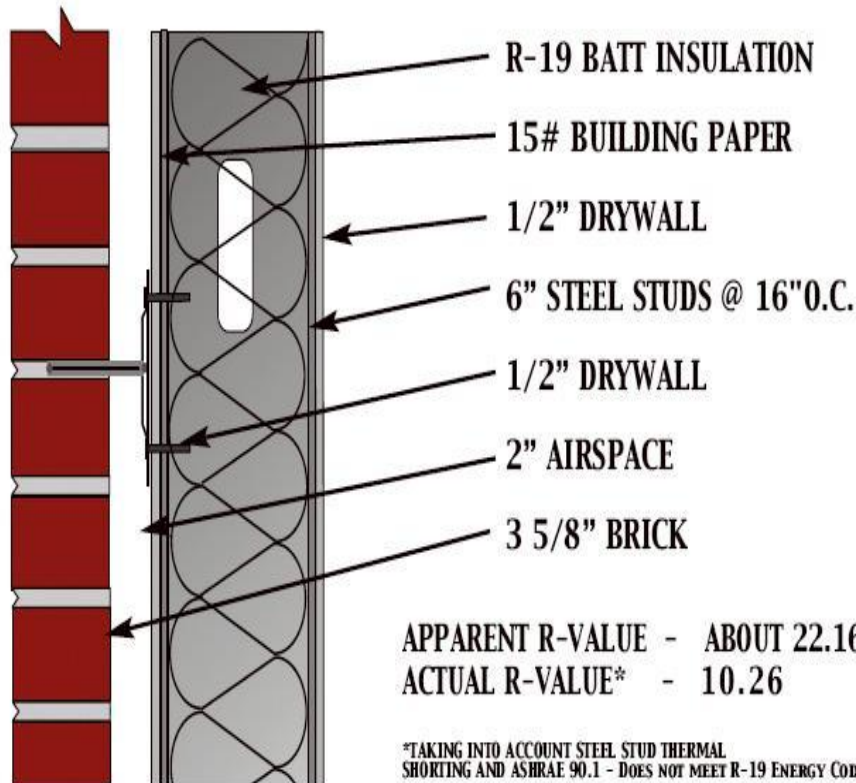
Legend	
—	Actual Temperature
.....	Dewpoint Temperature

Dewpoint Theory predicts condensation in a system at any point where the actual and dewpoint temperature lines cross.

Conditions:		
	Interior	Exterior
Temperature	72.0	0.0
Humidity	50.0	20.0

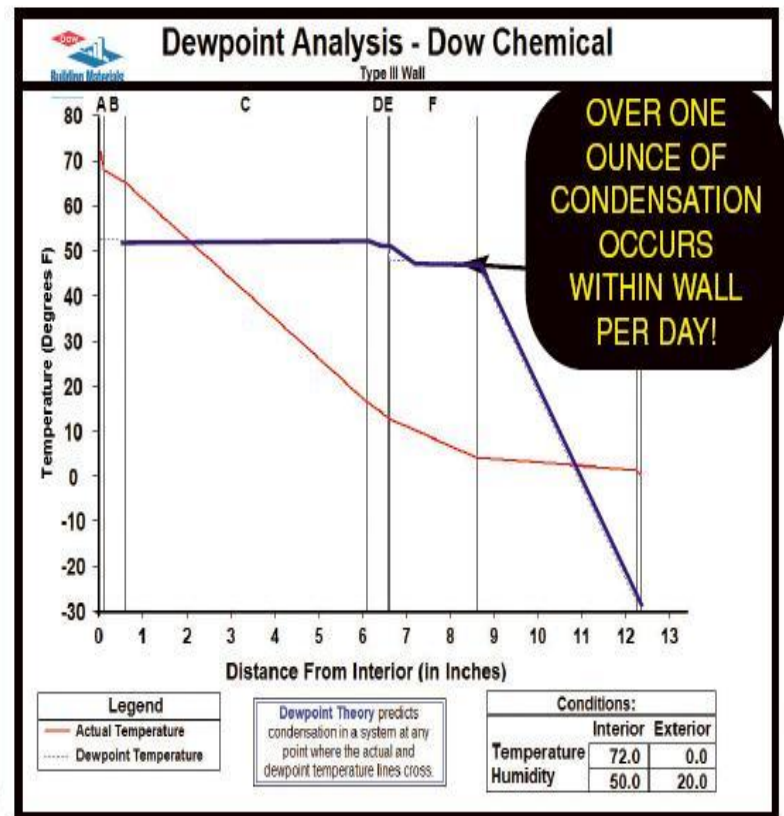
Dew Point Analysis

BRICK VENEER / STEEL STUD WALL (PRIOR TO 8/02 CSI ARTICLE)

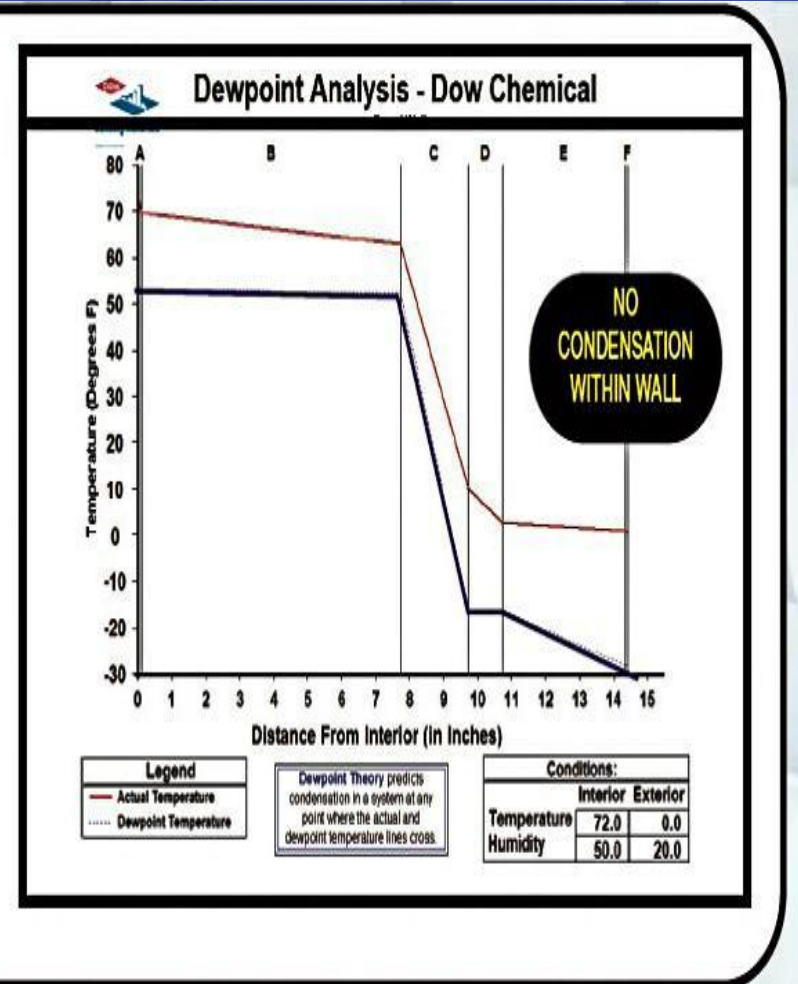
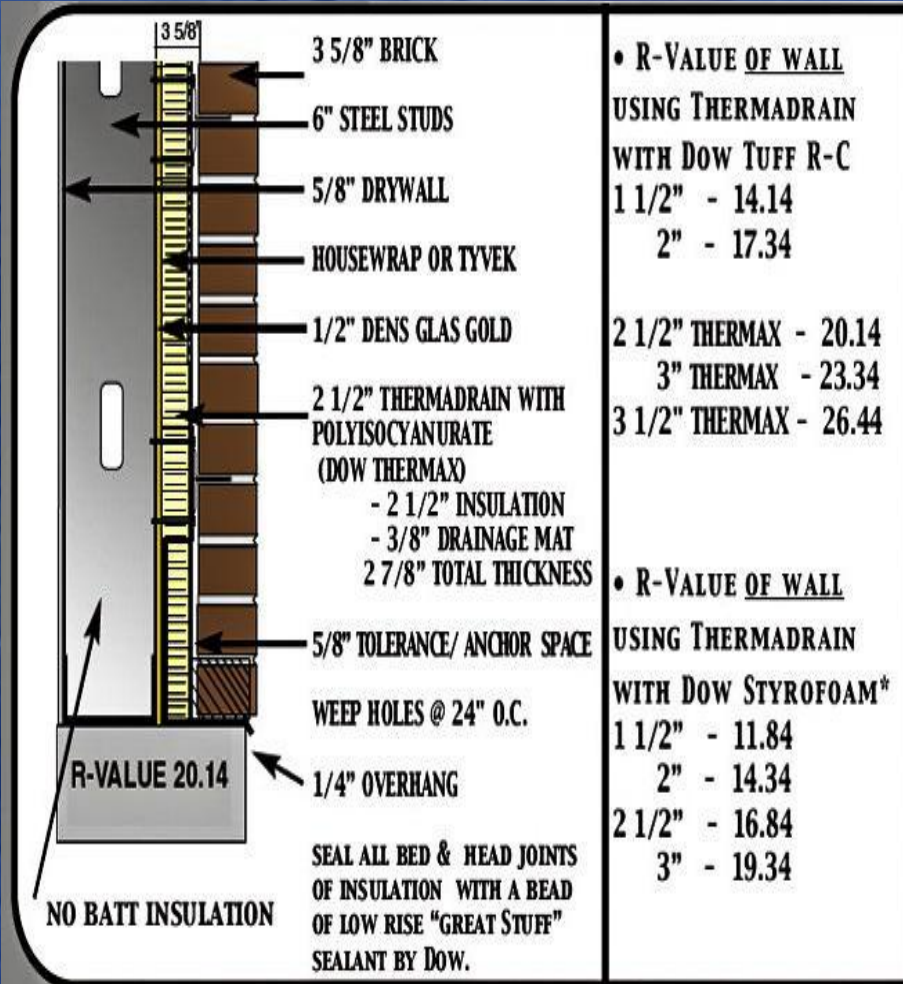


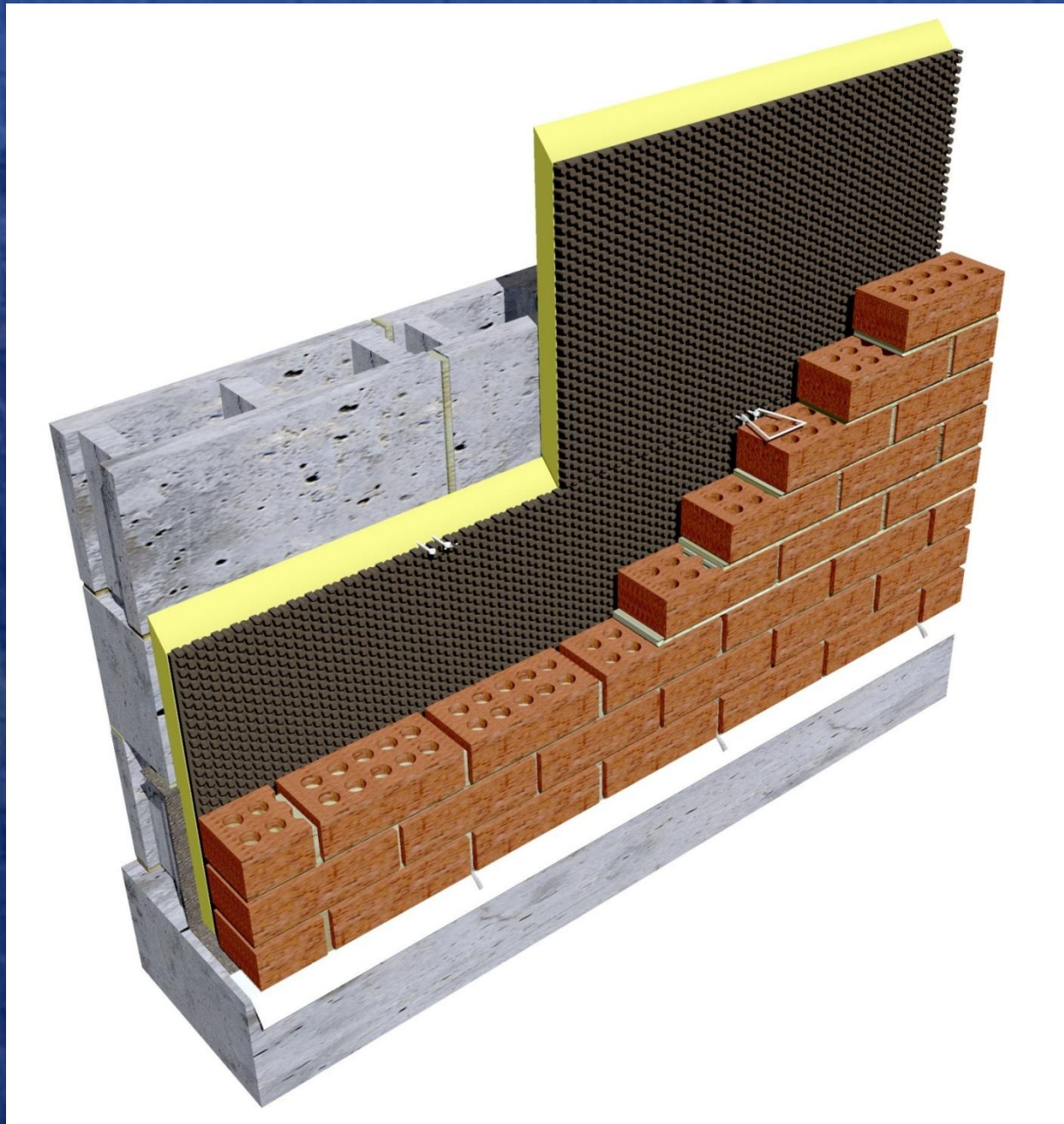
APPARENT R-VALUE - ABOUT 22.16
 ACTUAL R-VALUE* - 10.26

*TAKING INTO ACCOUNT STEEL STUD THERMAL SHORTING AND ASHRAE 90.1 - DOES NOT MEET R-19 ENERGY CODE)



Dew Point Analysis





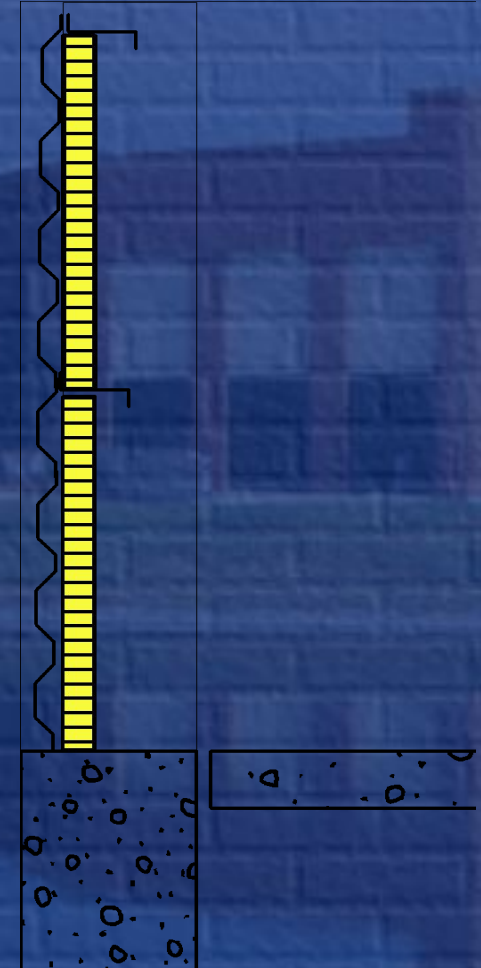
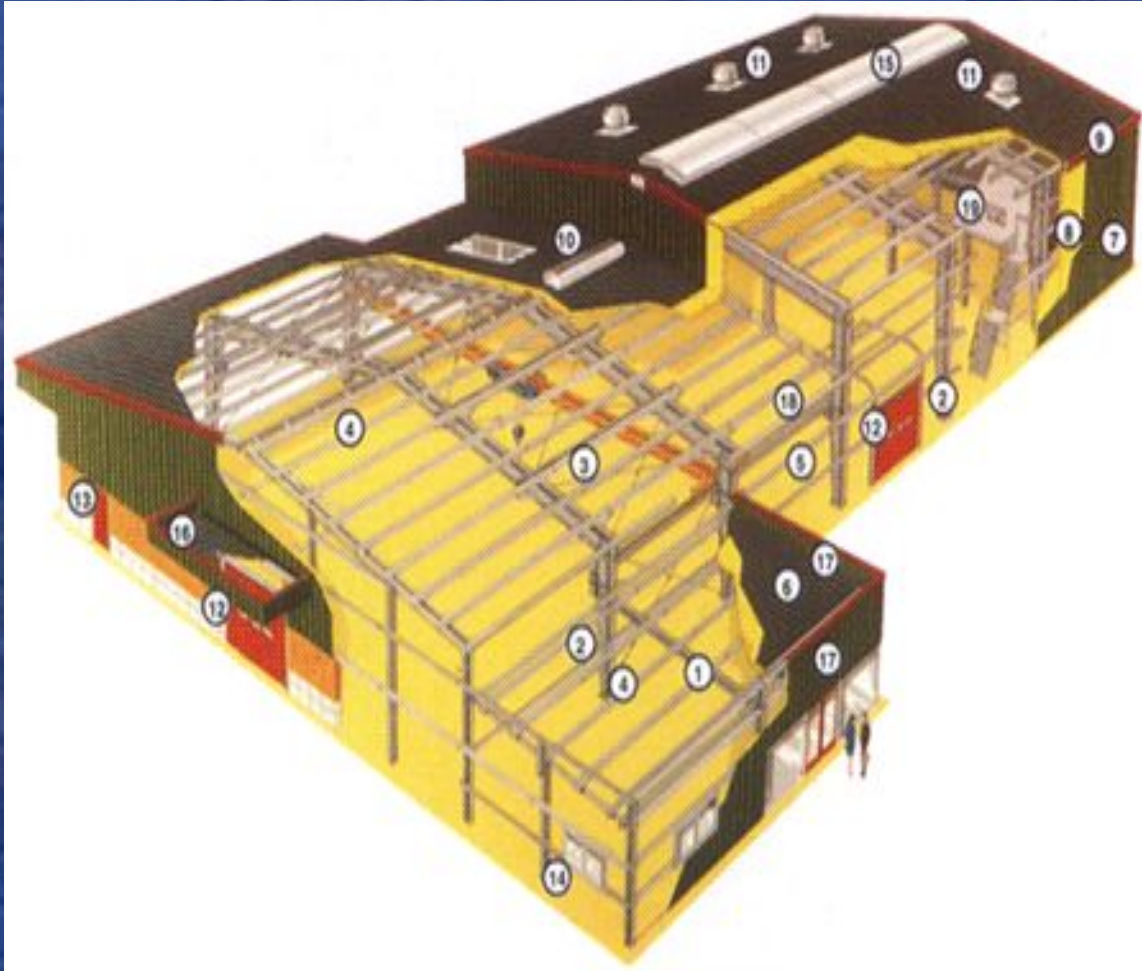
Glencoe Park District



Dominican University

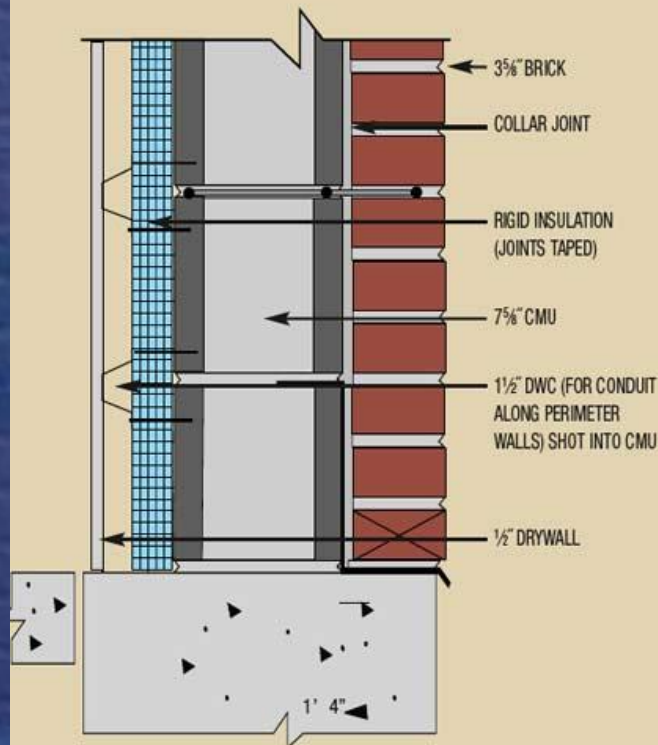


Metal Buildings



Commercial / Retrofit

SOLID COMPOSITE MASONRY WALL



R-Value of Wall Using Polyisocyanurate

1 1/2"	15.93
2"	19.13
2 1/2"	21.93

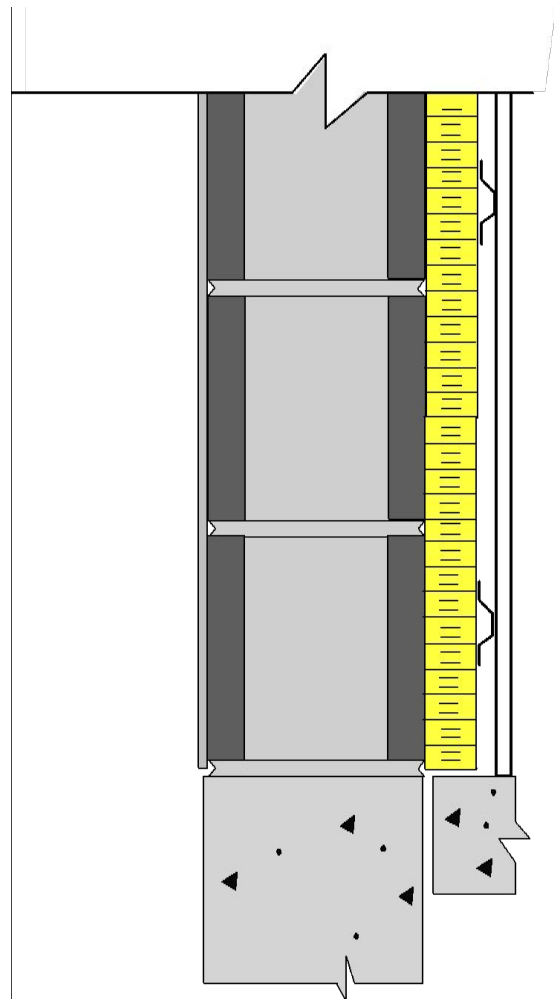
R-Value of Wall Using Extruded Polystyrene

1 1/2"	11.81
2"	14.31
2 1/2"	16.81
3"	19.31

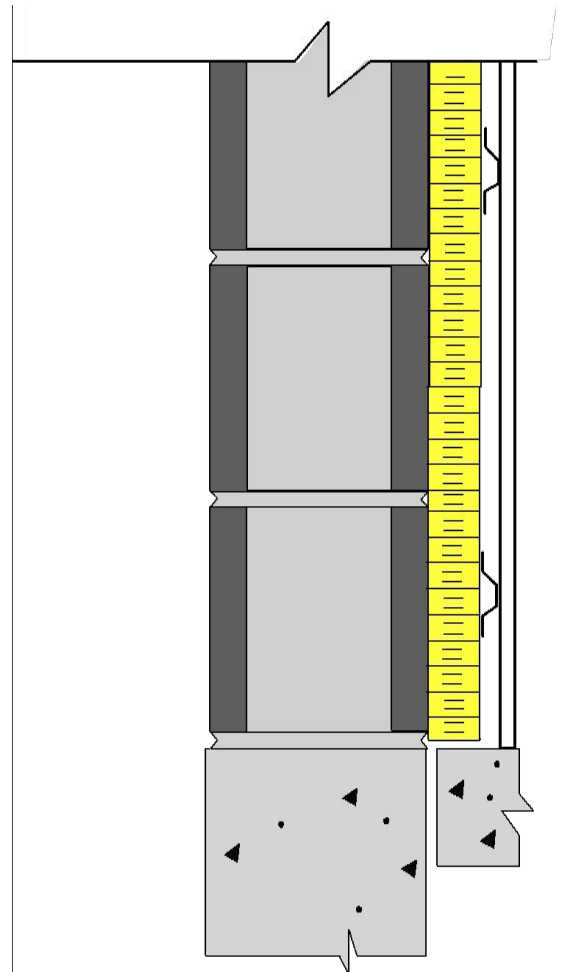
R-Value of Wall Using Expanded Polystyrene

1 1/2"	10.31
2"	12.31
2 1/2"	14.31
3"	16.31

Single Wythe CMU -Florida



Single Wythe CMU-Phoenix



For More Information Contact



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Park Ridge, IL 60068

847-297-6704

Or visit

www.masonryadvisorycouncil.org