

P2000 Insulation System Performance & Comparison Test

conducted by INTERTEK - Test Report # 3077735

TEST PROCEDURE:

July 21, 2005

boxes (1 cubic metre) equipped with a heat source (light bulb) and a thermostat set at 20 degrees (room temp) - insulated with different materials
boxes were placed in cold chamber together (minus 30 degrees) to monitor heat loss in each box (and compare insulation performance)
test engineers recorded power used and temperature readings for each test box and ran test 3 times (data readings listed below)

6" Fiberglass batting + Vapour Barrier

TEST	External Temperature (deg C)	Internal Temperature (deg C)	Current Amps	Area - Floor (sq. ft.)	Unit Heat Flow through unit area (watts) (sq. f.)s
1	-28.3	20.7	2.35	45.8218	258.5
2	-29	21.1	2.35	45.8218	258.5
3	-29.8	19.9	2.35	45.8218	258.5

1" P2000 Insulation System - Foil 2 sides - Flat on 1/2" Sheetrock

TEST	External Temperature (deg C)	Internal Temperature (deg C)	Current Amps	Area - Floor (sq. ft.)	Unit Heat Flow through unit area (watts) (sq. f.)s
1	-28.3	21	1.33	44.1594	146.3
2	-29	22.7	1.33	44.1594	146.3
3	-29.8	20.6	1.33	44.1594	146.3

5/8" P2000 Insulation System only (White to inside - Foil to outside)

TEST	External Temperature (deg C)	Internal Temperature (deg C)	Current Amps	Area - Floor (sq. ft.)	Unit Heat Flow through unit area (watts) (sq. f.)s
1	-28.3	23.1	2.02	44.883	222.2
2	-29	21.6	1.94	44.883	213.4
3	-29.8	20.4	1.94	44.883	213.4

3/8" P2000 Insulation System only (White to inside - Foil to outside)

TEST	External Temperature (deg C)	Internal Temperature (deg C)	Current Amps	Area - Floor (sq. ft.)	Unit Heat Flow through unit area (watts) (sq. f.)s
1	-28.3	19.9	2.38	44.3278	261.8
2	-29	20.7	2.47	44.3278	271.7
3	-29.8	20.4	2.47	44.3278	271.7

OBSERVATIONS:

compare the wattage recorded on the 6" of fiberglass and P2000 3/8" - very close !!
compare the wattage recorded on the 6" of fiberglass compared to the 1" of P2000
note that 1" P2000 was installed flat against sheetrock - with NO AIRSPACE
note that 3/8" and 5/8" P2000 had its white finish facing inside - NOT the foil

