

Summary of radon emanation measurements on Urylon

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The following is a summary of the measurements of radon emanation into vacuum done on Urylon materials.

Sample 1

201-15FR (dark colored, 58 cm by 107.6 cm, 2 mm thick) and 201-25 (57 cm by 105.5 cm, 2 mm thick). Both pieces were loaded into one emanation chamber.

January 1992

$2.1 \pm 0.2 \text{ Rn m}^{-2}\text{h}^{-1}$

Sample 2

Urylon 453 (85% relative humidity, white), 6 mm thick applied onto metal sheet and then separated off.

2.4 m²

Sept. 1992

Lots of volatile given off due to parafin wax and release agent used. There was a undetermined amount of radon lost during extraction because of the high pressure created by these volatiles in the radon board.

40 to 90 Rn m⁻²h⁻¹

Sample 3

Urylon 201-15FR (72% relative humidity, white), 3 sheets

0.49 m²

Dec. 1992

$103 \pm 3 \text{ Rn m}^{-2}\text{h}^{-1}$ (for more details see SNO-STR-93-001)

Sample 4

Urylon 201-25 (50 mil, white) applied at the 6800 foot level, one sheet

2.4 m²

March 1993

$11.4 \pm 0.8 \text{ Rn m}^{-2}\text{h}^{-1}$