

Two identical wooden boxes were furnished with incandescent lamps and thermocouples at the same positions inside the boxes. One box was coated with 3 coats of GP in all surfaces inside and outside.

At an ambient temperature of 28 C, both heating elements were switched on and temperatures noted against time.

<u>Time</u>	Temp. Increase/C		Temp. Increase/C		Temperature	
	<u>Nansulate GP</u>	<u>No Insulation</u>	<u>Nansulate GP</u>	<u>No Insulation</u>	<u>Difference/C</u>	<u>% Energy Difference</u>
00:00:00	28.0	28.0	0.0	0.0	0	
00:03:00	39.1	36.3	11.1	8.3	2.8	
00:05:00	44.4	41.3	16.4	13.3	3.1	
00:10:00	55.7	51.2	27.7	23.2	4.5	19
00:16:10	63.0	57.3	35.0	29.3	5.7	19
00:19:00	66.1	59.8	38.1	31.8	6.3	20
00:20:00	67.3	60.8	39.3	32.8	6.5	20
00:22:00	68.9	62.1	40.9	34.1	6.8	20
00:24:00	70.0	63.5	42.0	35.5	6.5	18
00:26:00	71.5	64.4	43.5	36.4	7.1	20
00:28:00	73.2	65.8	45.2	37.8	7.4	20
00:33:00	75.8	67.6	47.8	39.6	8.2	21
00:35:00	76.5	68.2	48.5	40.2	8.3	21
00:38:00	77.5	68.9	49.5	40.9	8.6	21
00:40:00	78.3	69.7	50.3	41.7	8.6	21
00:41:00	78.6	70	50.6	42.0	8.6	20
00:46:00	80	71.2	52.0	43.2	8.8	20
00:49:00	80.7	71.9	52.7	43.9	8.8	20
00:52:00	81.4	72.5	53.4	44.5	8.9	20
00:55:00	82	72.9	54.0	44.9	9.1	20
00:58:00	82.5	73.5	54.5	45.5	9	20
01:00:00	83	74	55.0	46.0	9	20

Comments

1. Nansulate coated box reached 70 C in 24 minutes whereas un-insulated box reached the same temperature in 41 minutes.
2. Heating time of Nansulate coated box overall seem to have halved.