



## Product Used

Spaceloft™ 9251

## ParaClad Aerogel-Insulated Panel System Reduces U-Values of Mobile Home by 55% and Carbon Emission by 1 Metric Ton/Year

Exterior insulation installs quickly with minimal occupancy disruption

## Fabrication Partner

Parasol Panel Systems LLP  
([www.parasolpanels.co.uk](http://www.parasolpanels.co.uk))

### Challenges

- Provide insulation for UK government program to upgrade insulation in mobile homes at a targeted cost.
- The insulation needed to improve the homes' U-values to save energy and reduce carbon emissions.
- Fast and cost effective installation was required.

### Aerogel Solution

- Parasol Panel Systems LLP designed a solution of ParaClad panels using **Spaceloft™ 9251** to cover the mobile home exterior.
- The solution was composed of a double skin laminate over Spaceloft 9251 with a total thickness of 13 mm.
- Two workers insulated the entire structure in two days with minimal occupancy disruption.
- The ParaClad panel system met U Value and other functional requirements.

### Benefits

- The ParaClad panel system using Spaceloft 9251 cost-effectively met all energy targets. (Details on back.)
- Using thin Spaceloft 9251 insulation eliminated the need to modify window and roof fixtures, which would have been necessary with conventional exterior insulation.
- The increased transmission loss of the new wall has greatly reduced the noise level within the home.

### U-Value and Energy Savings from Installation of ParaClad Panel System Using Spaceloft 9251 Insulation\*

- **U-value reduction:** 0.54 W/m<sup>2</sup>k, (0.98 - 0.44 W/m<sup>2</sup>K), a 55% reduction
- **Energy reduction:** 3,500 kWhr/yr
- **Carbon emission reduction:** 950 kg/yr



ParaClad panels with Spaceloft 9251 were easily installed on the exterior of the mobile home.

The 9 mm Spaceloft insulation allowed the ParaClad panels to be thin enough to fit within the existing window casements. It provided the same insulating value as other conventional exterior insulation, which would have required extending the casements outward due to the material's thickness.



\*Calculations performed using the SAP-approved software package Northgate Maxim 5.

