CASE STUDY

Barangaroo Headland Park

PRODUCTS USED

ClimaFoam® XPS Board, 50mm
ClimaFoam XPS Board, 75mm

PROJECT

Barangaroo Headland Park Project

ARCHITECT

WMK Architecture

CONTRACTOR

Lend Lease
**CHALLENGE**
The Barangaroo Headland Park Project has a very large green roof space with varying levels of static loads (soil, grass, trees) and dynamic loads (people).

The performance requirements were for an insulation product that would be waterproof, have high compressive strength and also high thermal performance.

**SOLUTION**
Knauf Insulation supplied 5,907m² of 50mm and 424m² of 75mm 300kPa, ClimaFoam® XPS Board for the main structural “green roof” on the Barangaroo Headland Park Public Domain Building.

The area will be covered with turf and trees to provide a natural park land for all visitors to the precinct. ClimaFoam XPS Board has high compressive strength, which makes it suitable for applications that will be subjected to high load bearings.

ClimaFoam XPS Board is made using extruded polystyrene, which has a closed cell structure and therefore ensures the insulation boards are highly water resistant. With a compressive strength of 300kPa, the boards also provided the required strength to sustain a green roof and dynamic loads.

The ClimaFoam XPS Boards used were 600mm wide x 2200mm long, a convenient size to make installation quick. The boards also had a shiplap edge, which helped the installers secure the boards with an intimate contact at the joins, to ensure the high thermal performance of the insulation isn’t compromised by gaps.

**RESULTS**
ClimaFoam XPS Board was laid over waterproofing membranes and Geotextile fabrics with a drainage cell system installed on top. Adding further to the moisture management of the system, Climafoam XPS Board has a closed-cell structure which makes it highly water resistant.

ClimaFoam XPS Board will provide high thermal insulation and with high compressive strength, the boards will be able to sustain the static and dynamic loads.