

# Superseal Roofing Reference

Volvo Lastvagnar AB, Tuve, Gothenburg, Sweden



**Volvo Lastvagnar in Gothenburg, the main truck assembly plant of Volvo, always choose quality, whatever they do. And they choose with care. When the 50 000 sqm roof of the truck plant had to be reroofed, they issued a specified inquiry to all major roof membrane suppliers in Sweden.**

Six tenders were given, split on four types of material. The tenders were carefully and systematically judged. The eleven most relevant properties for economy, lifetime and function of each roofing system were judged in accordance with a pre-prepared method of evaluation. One condition of acceptance of tenders was also that installation had to be made without using any open flames on the roof, following the rules of the Swedish

Fire Department of Volvo with support of a roofing consultant, Takrådgivning Rolf Kristiansson in Gothenburg.

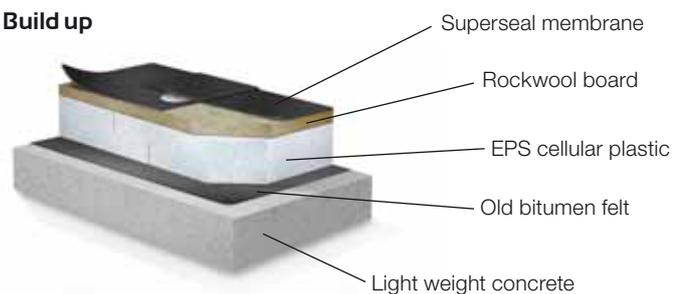
### **The reasons for Volvo to give Superseal the top rating**

Thanks to superior life time, flexibility, weight, fire resistance, environmental influence, system engineering and warranties, the clearly best buy was

Superseal EPDM, despite not having the lowest bid.

On top of the original lightweight concrete construction with two layers of oxidised bitumen a 55 mm EPS insulation and a 15 mm Rockwool board were installed. Superseal FR fleece backed EPDM was mechanically fixed. New stainless steel drains were fitted and 440 fire ventilators were raised and covered with prefabricated collars in EPDM.

### **Build up**



# Superseal Roofing Reference

Volvo Bilia, Vinsta, Stockholm, Sweden



Volvo Bilia, Vinsta. 8 000 sqm felted roof renovated with Superseal EPDM.

**Volvo Bilia in Stockholm is one of the largest car dealerships in Sweden. When their 8 000 sqm large service center in Vinsta should be re-roofed the quality and environmental aspects were as important as the square meter price. Volvo do not buy on price only, they consider lifetime, total quality and environmental factors in order to obtain the best long term economical building administration.**

The roofing contractor Tak & Tätskikt has over 30 years of experience from rubber membrane installations and could offer an engineered installation based on the Superseal EPDM membrane system.

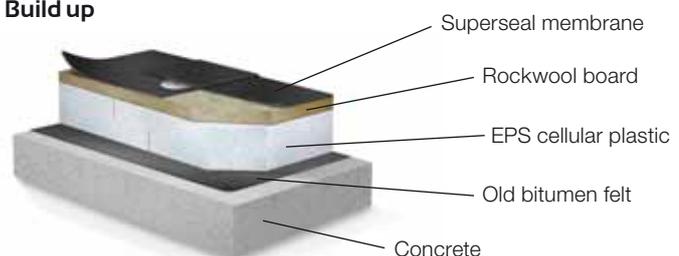
## Construction of the new Superseal roof

The old roof consisted of a concrete deck and two layer oxidised bitumen felt suffering from heavy blistering and cracking. The roof was renovated in two stages with a year between installations, 4 000 sqm's in 1997 and further 4 000 sqm's in 1998.

The felt roofing was cleaned and blisters cut down. An additional 100 mm EPS insulation disrupted by Rockwool in

sections for fire protection reasons, was installed. For further improvement of fire resistance a mineral wool nonwoven was placed on top of the EPS. Superseal EPDM roll width 1,30 m was positioned with a 50 mm overlap. The membrane was mechanically fixed to the deck with washers and concrete nails. Then splicing of the roof was made, using Thermobond splice strips and electrical hot air guns.

## Build up



# Superseal Roofing Reference

Fraktarna Freight Terminal, Länna, Sweden



New storage and freight handling terminal for the major haulage company Fraktarna.

**During autumn 1997 the haulage and logistics company Fraktarna AB built a new distribution terminal in Länna, Huddinge, south of Stockholm. The general building contractor for the 10 000 sqm large storage was Fastec AB and the installer of the roof was Tak & Tätskikt AB.**

A steel deck with large distances between supporting beams results in exceptional movements and stresses in the roofing membrane during a year of Scandinavian climate, with temperatures ranging from +30 to -20°C.

Fraktarna chose Superseal EPDM membrane because rubber is elastic, will absorb any elongation at any temperature. With a Superseal roof they can expect decades of trouble-free, watertight roofing performance.

## State of the art roofing construction

The new storage of Fraktarna have a "dual" roof construction. The insulation is built up with one layer of expanded polystyrene and one layer of mineral wool. On the substrate of TRP metal a layer of Rockwool was placed, on top of this a vapour retarder of polyethylene film, then EPS insulation. On the EPS a 20 mm thick board of mineral wool is fixed.

The 1,30 m wide Superseal EPDM membrane was unrolled with a 50 mm overlap. The membrane is fixed to the metal deck with screws and telescope washers, allowing for vertical movements of the screws. To suit the size of the building, special length rolls of 28,5 m were used. The Superseal membrane was spliced using hot air machinery. With large open surfaces the installa-

tion work was fast and independent of weather conditions, despite work in the harsh late autumn weather in Sweden.



Thermobond hot air splicing.