YashoBhoomi (IICC) Dwarka

Roof Waterproofing

World's largest MICE (Meetings, Incentives, Conferences, and Exhibitions)

Built at the cost of Rs 5,400 crore, 'Yashobhoomi' has a total built-up area of more than 1.8 lakh square metres, and will find its place among the world's largest MICE facilities. Multiple exhibition halls, grand ballroom, and convention rooms provides a stage of hosting trade fairs, business events and meetings.

It has a seating capacity of over 11,000 delegates and comprises of 15 convention rooms. It has around 13 meeting rooms spread across eight floors and has a grand ballroom. The plenary hall in the convention centre is equipped with a seating capacity of around 6,000 guests.

The auditorium at the convention centre has an automotive seating system suitable for various occasions. The automotive seating system allows the floor to be a flat floor or an auditorium style tiered seating for different seating configurations.

The grand ballroom facility can host around 2,500 guests and has an extended open area that can seat around 500 people.

The exhibition halls are spread across over 1.07 lakh square meters. Halls are also connected to a grand foyer space, designed with copper ceiling. The foyer will house several support areas such as media rooms, VVIP lounges, cloak facilities, visitor information centre and ticketing among others.

Quick Facts

Project scope:

- World's Largest MICE
- 25000 sq.m. of roof waterproofing carried out with 1.5mm Firestone EPDM
- High visibility and prestigious project
- To deliver an excellent waterproofing to preserve water for seeping into the building
- **Client**: **IICC**
- **PMC**: **AECOM**
- **Architect**: **CP Kukreja Architects**
- **General Contractor**: **L&T Construction**

Features of EPDM Membrane:

- Waterproofing membrane High elasticity (>300%)
- Long-term durability
- Fewer Seams
- Excellent fire rating. LSFR (Low Slope Fire Retardant)
- Fast and easy installation
- High flexibility (at high and low temperatures, as a result adapts to irregular shapes)
- High puncture resistance
- Low environmental impact
- Outstanding UV resistance, ozone and heat ageing

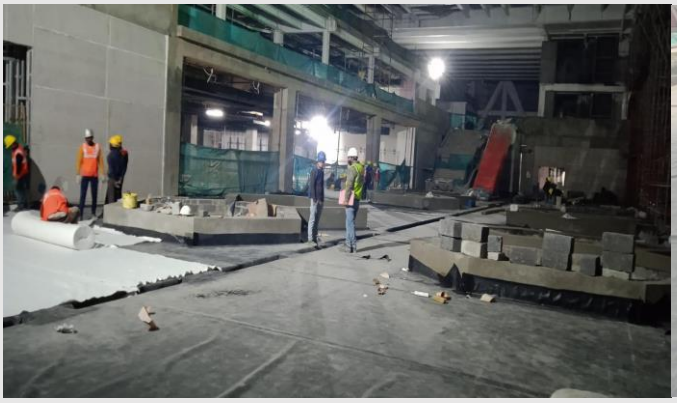
Installation Process:

The **EPDM membranes** (without stretching) was unrolled onto the substrate as close to the required final positions as possible, and allowed to relax for a minimum of 30 minutes before attachment or splicing operations (Remember the surface must be clean, dry and free of any foreign materials or contaminants which could cause damage). The EPDM membranes was positioned allowing for a sufficient overlap for splicing with the adjoining EPDM membranes at all edge. All standard seams were joined using a 76mm wide, double-sided, rubber adhesive **splice tape**, in conjunction with a solvent-based primer to shed water.

An appropriate **perimeter base tie-in** detail was installed at all locations where the EPDM membrane ends or passes through an angle change greater than 15%. Base tie-in using batten strip: The EPDM membrane was mechanically attached at the base of the angle change using **Galvalume® AZ55 batten strips** with red epoxy electro-coated, drill point **steel fasteners** of 6.98mm diameter to provide minimum penetration. A separate **EPDM flashing** was provided to the upstand to protect the installed batten strip. Then the EPDM membrane was fully adhered to all upstands and vertical faces using a **neoprene-based rubber contact adhesive**. The adhesive was applied in an even, smooth coat onto both surfaces avoiding any globs and puddles. sufficient time was allowed for the adhesive to flash off until tacky prior to mating the surfaces. Care was taken to keep the seam edges clear of adhesive. Provided with a minimum design height of at least 150 mm above the finished roof surface for all flashing terminations.
The adjacent wall was terminated with **aluminium termination bar**. The EPDM flashing was fully adhered over its entire height and mechanically terminated at the top edge using a 27mm wide corrosion-resistant aluminium termination bar, fastened every 200mm with an appropriate drive rivet type fastener. Prior to installation of the termination bar, a continuous bead of **water repellent sealant** was installed between the EPDM membrane and the substrate at the top edge. Once the termination bar is securely fastened, a continuous bead of **EPDM sealant** was applied along the top edge of the bar to complete the detail.

The field EPDM membrane was installed prior to installation of the outlet insert. A circular hole over the drain position was cut and the outlet insert was installed onto a bed of water repellent sealant and secured to the structure. The flanges of the outlet insert were waterproofed using **self-adhesive, uncured EPDM strips**, ensuring that all edges of the outlet insert and fastener heads are overlapped by 75mm minimum and also that fastener heads are overlapped by 75mm minimum.






For further information about waterproofing applications, please contact: DBS Building Products Sri Sobha Sing Building, 5286-87, Shardhanand Marg Delhi-110006 Tel: 011-66308888/23216062 Email: sales@delhibuilder.com / Info@dbsbp.com