



Precast and Tilt-up - Opera House Built from Precast not Tilt-up

Any confusion that exists regarding the differences between precast and tilt-up is not helped by articles such as that published in a recent edition of Australian Concrete Construction, titled 'Tilt-Up Construction Moving Forward'.

The article has a huge error in claiming that the Sydney Opera House "was an on-site Tilt-up building". The concrete prefabricated elements of the Opera House were entirely precast concrete without a piece of tilt-up. They were made in two sophisticated precast concrete factories. One was the EPM Concrete (NSW) Pty Ltd factory at Blacktown and the other a dedicated factory set up by Hornibrooks on site. EPM manufactured the entire pink Tarana granite wall, external paving

and other panels that, along with the roofs, define the way the Opera House looks. These were sophisticated honed and acid etched units that were poured in two layers. The "semi-skilled labour" that the article refers to is an affront to the men working

on the project. It was a job requiring very great skill indeed: skill in mix control, skill in pouring techniques, skill in curing, skill in honing and skill in etching.

The roof components and the other structural components were manufactured by the builder in a dedicated precast factory set up on site. These were sophisticated products - end matched and post tensioned in the case of the roof ribs and to very precise dimensions in the case of the tiled roof panels. Once again, these were manufactured by very skilled labour using sophisticated equipment. EPM bought the Whirler crane used in the precast site factory at the end of the project and installed it at Blacktown.

So nothing on the Opera House was tilted and nothing was made with unskilled labour.