

In 2002, the entire cornice course and a small number of other stones in the National Art School (former chapel of Darlinghurst Gaol) in Sydney were replaced with Paradise yellowblock.

YELLOWBLOCK TO STOCKPILE OR NOT?

by Ron Powell

On 29 February this year, Sydney Town Hall closed its doors for an 18-month refurbishment of the interior. Attending to the exterior – a once-impressive but now crumbling sandstone façade – will take much longer.

Considered to be one of the world's most significant sandstone buildings of the late nineteenth century, the Town Hall now requires considerable attention. Some elements of its lavishly carved exterior have decayed so much that replacement is the only option. The choice of replacement sandstone has generated much interest and has attracted coverage in the *Sydney Morning Herald*, which ran a story in the 5–6 January edition followed by a lead editorial in the 7 January edition.

Most of Sydney's major nineteenth-century buildings were built from Pyrmont yellowblock sandstone, a fine-grained sandstone which has played a significant role in defining the city's character. Unfortunately, there are no fresh supplies to meet the demand for regular restoration work – none of the original yellowblock quarries operates today, as they were located in what are now heavily developed areas of Sydney. As Sydneysiders re-discover their glorious golden sandstone heritage, the *Sydney Morning Herald* editorial called on the State Government and City of Sydney to “put their heads together” and “come up with incentives attractive to developers” to harvest yellowblock from building sites before construction begins.

But this seeming clarion call has ignited controversy. Jasper Swann, a heritage masonry consultant, was quick to respond to the editorial, claiming that stockpiling yellowblock is not the best answer to achieve an appropriate colour match in conserved buildings. The stone “...needs to be supplied from an active source,” he wrote in the paper on 8 January. “If stockpiled, it will retain little or no ability to oxidise [revealing its trademark golden colour] when eventually sawn to size.”

However, yellowblock has traditionally been left to rest for at least several months before being used – to allow any flaws to become evident. For example, the NSW Government's Public Works Department acquired over 4000 cubic metres of Pyrmont Paradise Yellowblock in

2001, which has since been used on many state-owned and other buildings such as Trades Hall, Town Hall and the Great Synagogue in Sydney, and St Paul's Cathedral in Melbourne.

In some of its first uses, such as in the Darlinghurst Gaol, variations in the yellowblock's siderite content temporarily caused unsightly brown ‘flashes’, but today, five years on, the replaced stone is indistinguishable from the original. More recently, stone installed at Sydney Hospital, cut after five years of stockpiling, has coloured quite evenly and has already achieved a harmonious fit within the original.

Stonemasons working for NSW Department of Public Works & Services (DPWS) have told me that when they trim off the rough outer edges of the quarry block, the interior is still very pale and does oxidise, although not as quickly or intensely as it did five years ago. Also, as the stone is a natural material, some blocks colour at different rates, and a small percentage stubbornly refused to colour at all.

The masons predict that if quarry blocks are stored for too long (more than ten years), then the yellowblock may not continue to colour evenly and may not form a hard ‘skin’. This is the obvious risk in stockpiling over an extended period, and the reason why DPWS and the City of Sydney are working together to find fresh supplies.

To date, no known commercially operating quarries can supply a stone that is the aesthetic equal of Sydney yellowblock, though we live in hope of finding the new ‘goldrush’. To have access to an operating quarry producing the equivalent of Pyrmont Paradise would be ideal.


Jasper Swann and others have criticised the patchwork of stone on buildings such as the Art Gallery of NSW and the Department of Education building in Bridge Street (see ‘Sydney yellowblock – Is its revival a blessing or a curse?’ in this issue, pages 22–28). This work, which was carried out before yellowblock became available, highlights the importance of a sympathetic replacement stone.

The aesthetic impact of new stone in an old building will always be marked by the fact that the new stone has not accumulated decades or

centuries of dirt and grime. This contrast can be lessened by cleaning or by artificially colouring stone.

How much we clean stone and by which method is a whole debate in itself. Applying a chemical solution to a stone for solely aesthetic reasons requires adequate research into the long-term implications. Until the stockpile of yellowblock is exhausted, and this research is conducted, there seems little reason to pursue this technique.

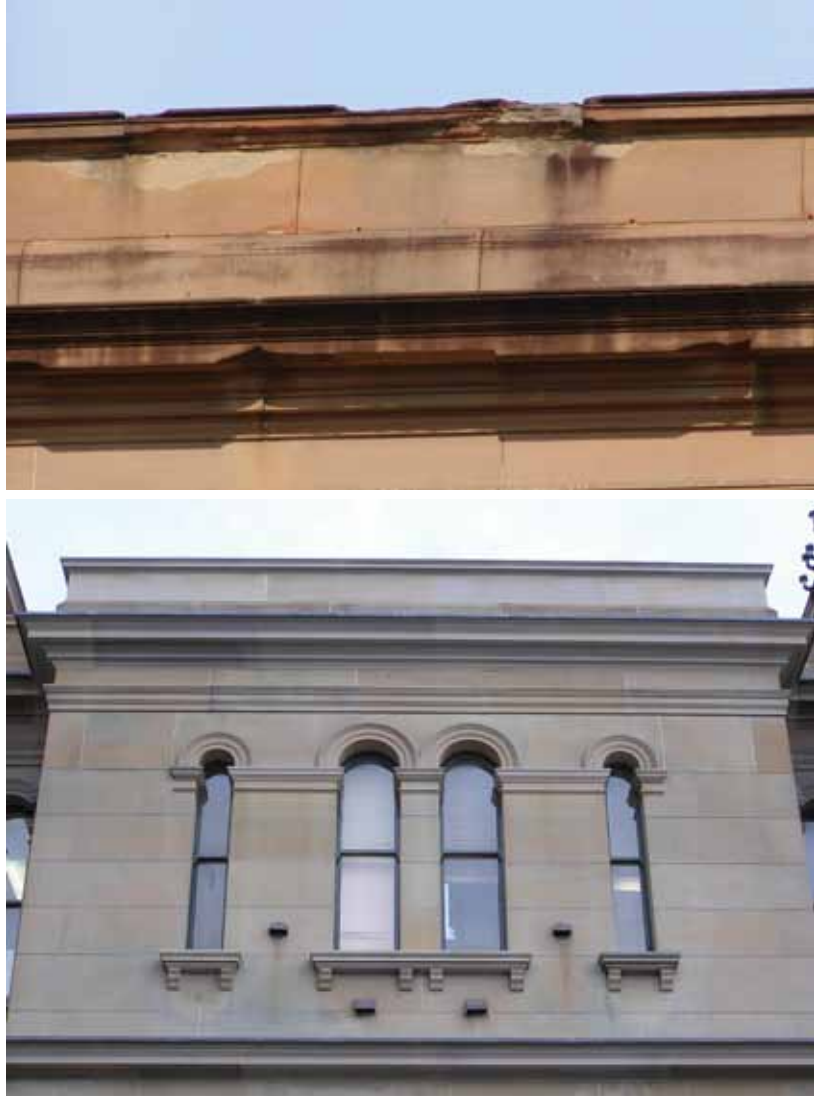
The likely outcome of government considerations will be to require developers and builders to submit test cores of the sandstone underlying their sites at an early, pre-development application stage of projects, to assess the quality of the stone and to look specifically for yellowblock. Incentives, rather than heavy-handed regulations, should be used to encourage the harvest of even the smallest quantities. The successful extraction of yellowblock from the excavations for several buildings in Pyrmont, The Rocks and Glebe has demonstrated the viability of this potential source of stone.

Using fresh supplies of a naturally colouring or oxidising sandstone to replace the lost detail in our heritage icons is surely the optimum solution. Until this dream becomes a reality, the best available option is to stockpile yellowblock stone, as it becomes available, for short- to medium-length periods. 

Ron Powell is Manager of the Centenary Stonework and Public Buildings Programs in the NSW Office of Public Works and Services in Sydney.

Top right: Sydney Hospital in 2002, before renovation works.

Bottom right: Renovation works for Sydney Hospital involved replacing stone in the top blocking course, cornice course, window sills and interfloor string course. The replacement stone was Paradise yellowblock, quarried at Pyrmont in 2001, stored as quarry block, and cut and processed in early 2005. This photo, taken in 2008, shows that the replacement stone is a good overall match for the original stone.



Images courtesy of Newforms Landscape Architecture. Photographer: David Adams.



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