

"Green Buildings, Sustainable Materials"

Feb 2009



Sustainable Manufacturing Since 1860



Together, we can improve the environment

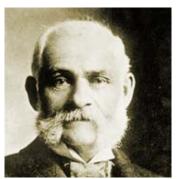






Armstrong Corporate Headquarte

Armstrong World Industries, Inc., a global leader in the design and manufacture of floors, ceilings and cabinets.



Thomas Armstrong







Sustainable Manufacturing



Armstrong Globally:

"Leaving a Smaller Environmental Footprint"

Targeting:

- Energy Efficiency
- Water Management
- Effective Use of safe raw materials
- Waste Minimisation
- Emissions









Armstrong US Head Quarters – LEED Platinum!

LEED-EE

FOR EXISTING BUILDINGS



Armstrong Globally

Armstrong product and programmes help clients to earn LEED credits in sustainable design in the USA

Achieve LEED Credits

with Armstrong Ceilings Systems





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Energy and Atmosphere

Energy Credit #1 - Optimize Energy Performance

Hi-LR ceilings can help a building project qualify for LEED points. The ceilings provide the same workplane luminance with less luminaries and meet the ASHRAE standard by the required 20% for new buildings and 10% for renovations.

Materials and Resources Material Credit #2 - Construction Waste Management

Armstrong is the only ceiling manufacturer with a recycling program

Material Credit #4 - Recycled Content

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Material Credit #5 -Local/Regional Materials

Our seven ceiling plants and five suspension system plants are located throughout the nation, which reduces the environmental impact of transportation from plant to project.

Material Credit #6 - Rapidly Renewable Materials

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Indoor Environmental Quality

IEQ Credit #8 - Daylight & Views

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Innovation Credits

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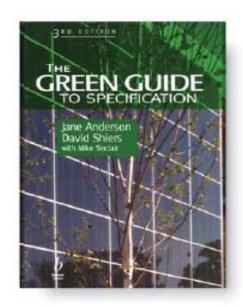
- Acoustical performance
- Sound masking with i-ceilings





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Armstrong - reaching new heights

A guide to sustainable suspended ceiling systems





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ISO 14024 compliant Eco Label

- Australia
- Singapore
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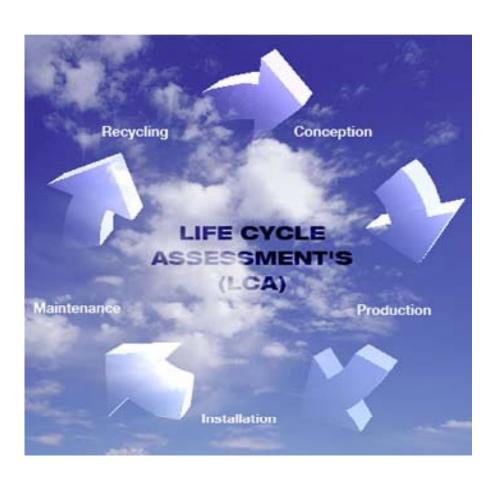




Armstrong Product – "Sustainable Cornerstones"

- High Recycled Content up to 94%
- Reclaim -> Recycle -> Reduce
- "Cradle-to-Cradle" Ceiling Recycling Programme since 1999

More than 5 million square metres of ceilings have been recycled.



Environmental Production



Reduce environmental impact by recycling old acoustical ceilings.



6. RECYCLE

- Closed-loop process for sustainable environment
- Raises post-consumer recycled content of new ceilings
- Recycled 35 million sq. ft. of ceiling tile to date



- Modular installation and ease of deconstruction
- 80% to 90% less construction waste than drywall
- Tiles are 100% recycleable





5. RECLAMATION

- Old ceilings recycled into new ceilings
- No sending old ceilings to landfills

2. MATERIAL FEEDSTOCK

- Recycling 1 ton of tile
 - 980 kg CO2 equivalent
 - 10 tons of virgin raw materials
 - 1000 gallons of water saved
 - 2800 kWh electricity equivalent





4. TRANSPORTATION

- Recycle old ceilings retrieved in area driving trucks
- Multiple plant locations minimize transportation
- No transportation to landfills

3. MANUFACTURING

- All production scrap reused
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AU Green Credentials



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• Member: GBCA

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- Ecospecifier listed (A) products
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Armstrong and Green Star



Armstrong and Green Star - External Audit

Contributes to Green Star Credits:

Improved Indoor Environmental Quality (IEQ)

- Effective Acoustic Control
- Low VOC emissions*
- "Low" / "No added" formaldehyde*
- High LR (enhances "daylighting" reduces lighting energy)

*(Tested by CETEC and Berkeley Laboratories)



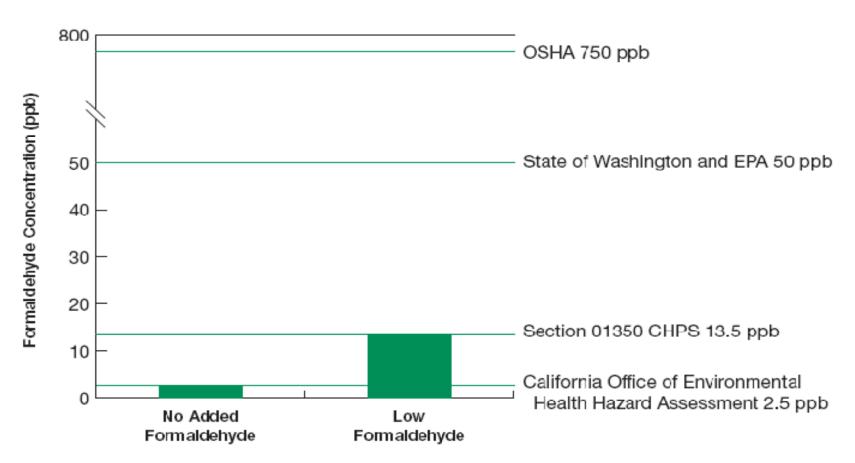


Armstrong and Green Star: IEQ



Armstrong Low/No-Added Formaldehyde Ceilings Reduce Indoor VOC Emissions

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Armstrong and Green Star - Materials

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green building council australia







External Green Star Audit





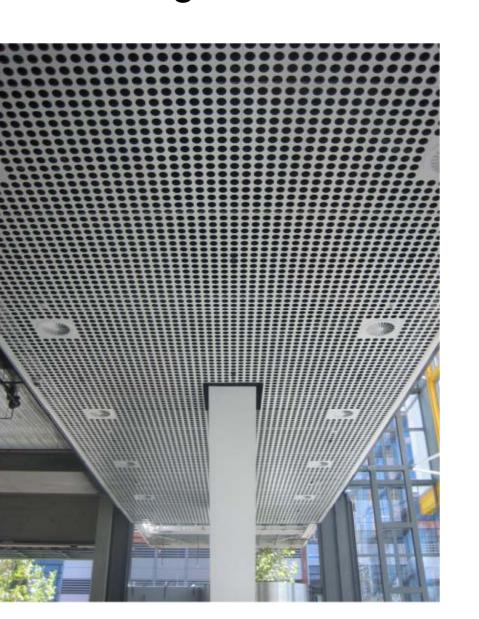
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Recycling – "A Green Future"



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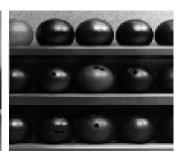


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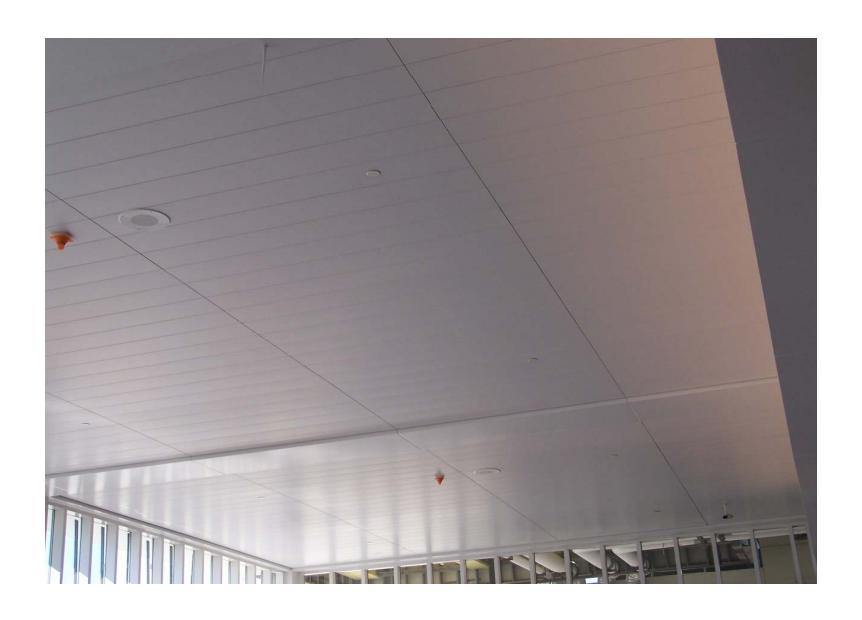
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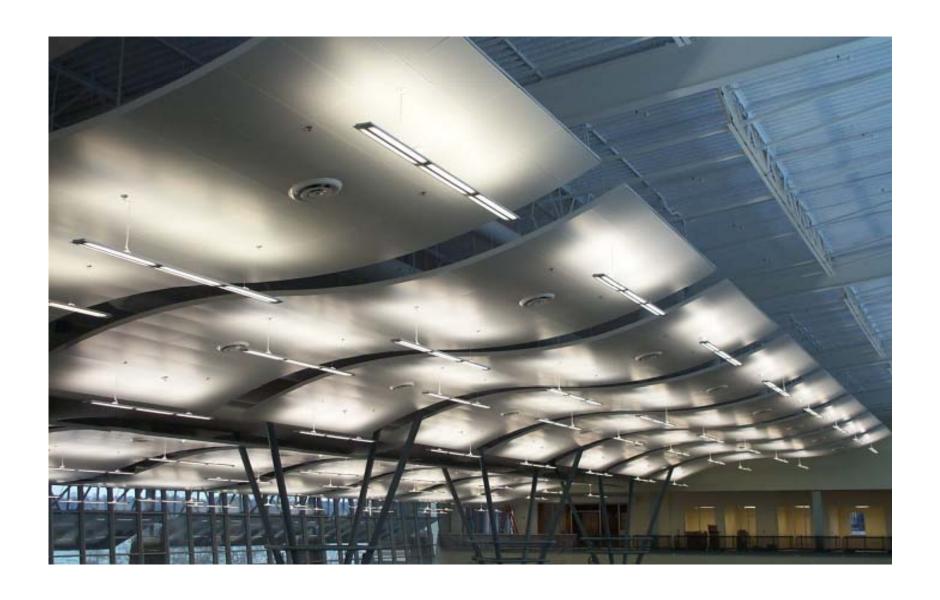












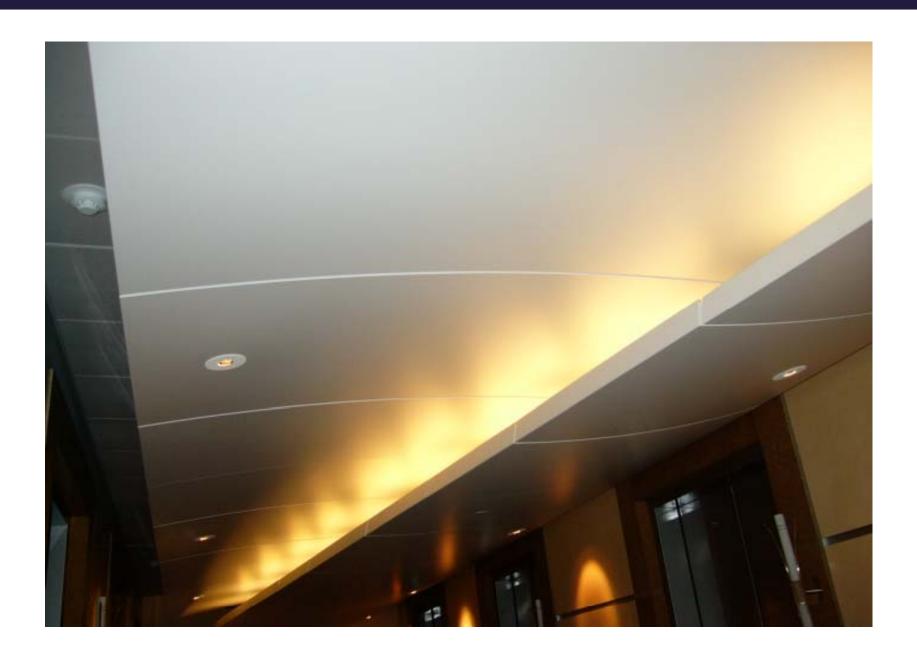






































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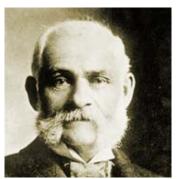






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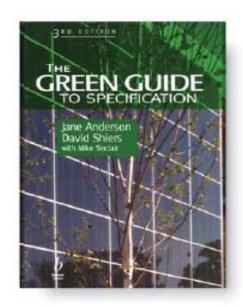
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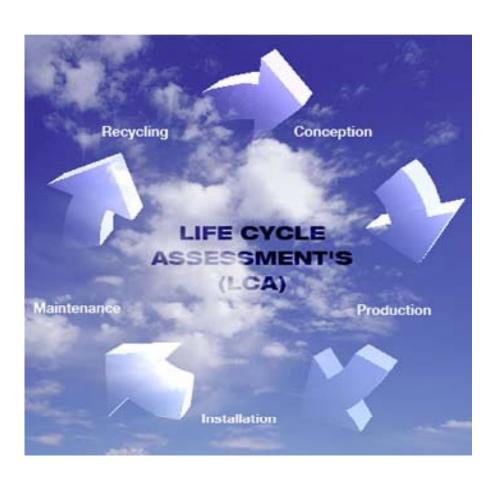




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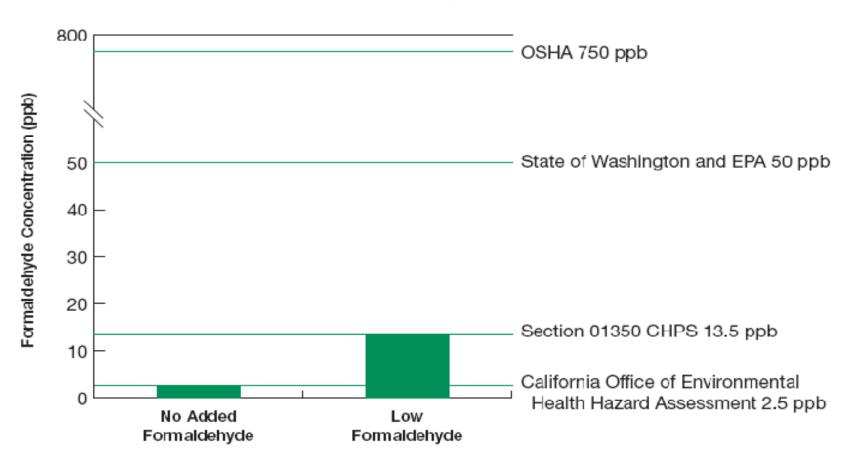


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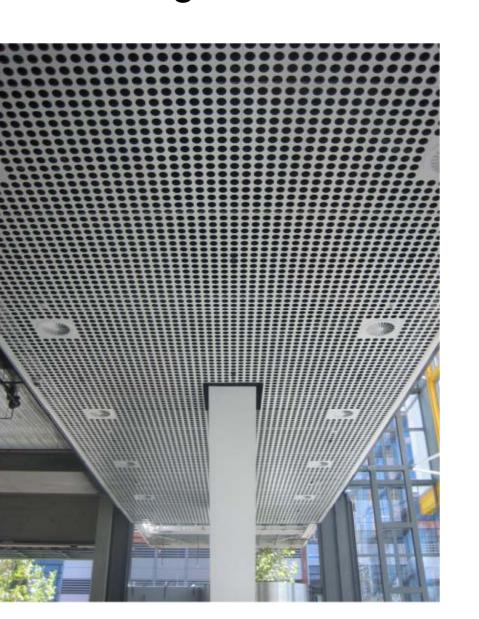
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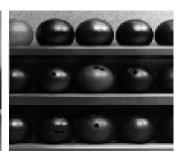


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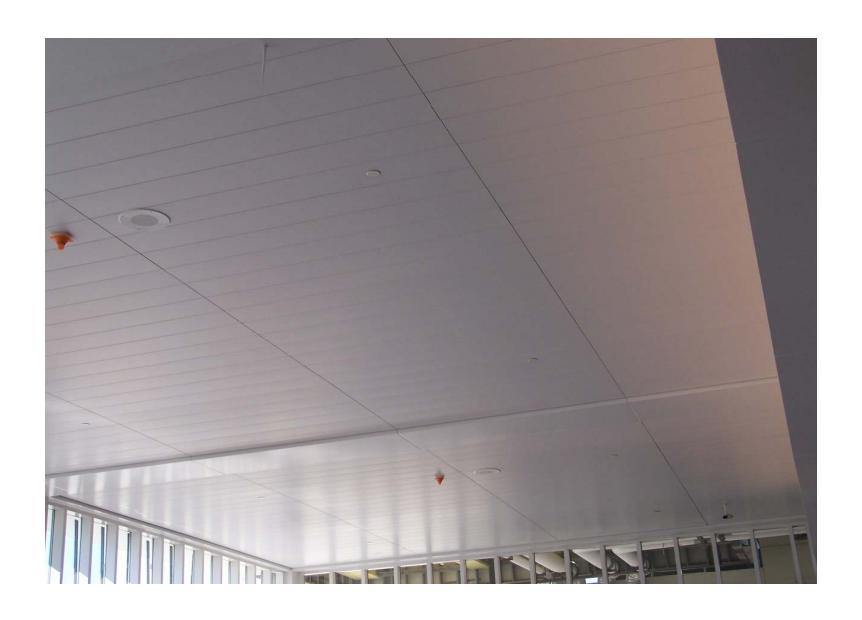
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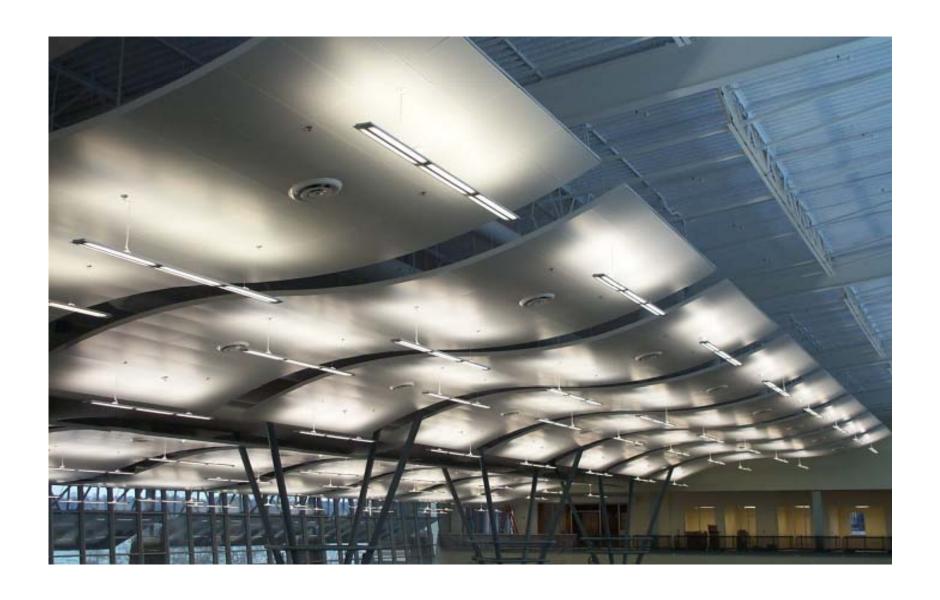












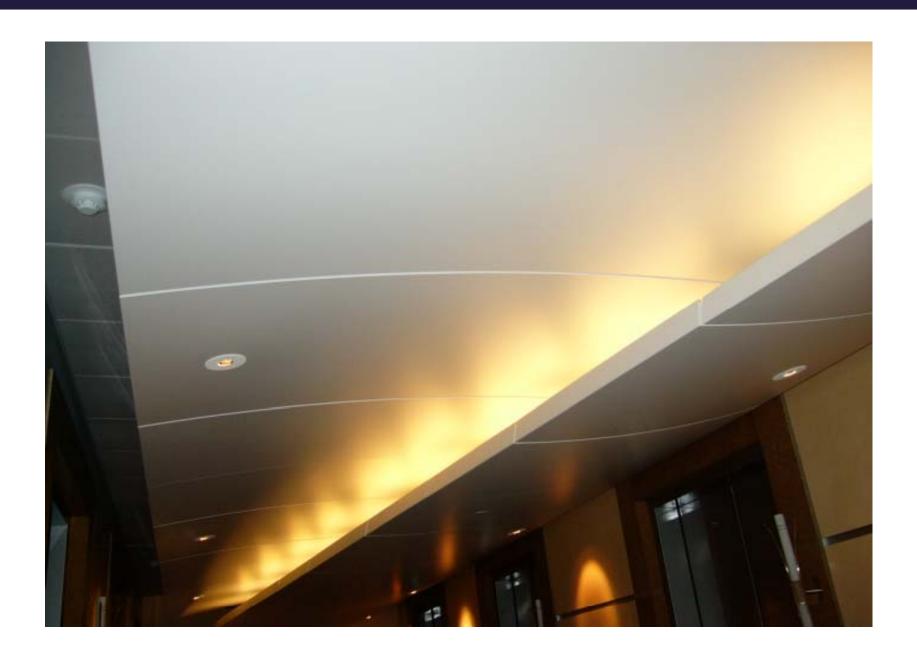












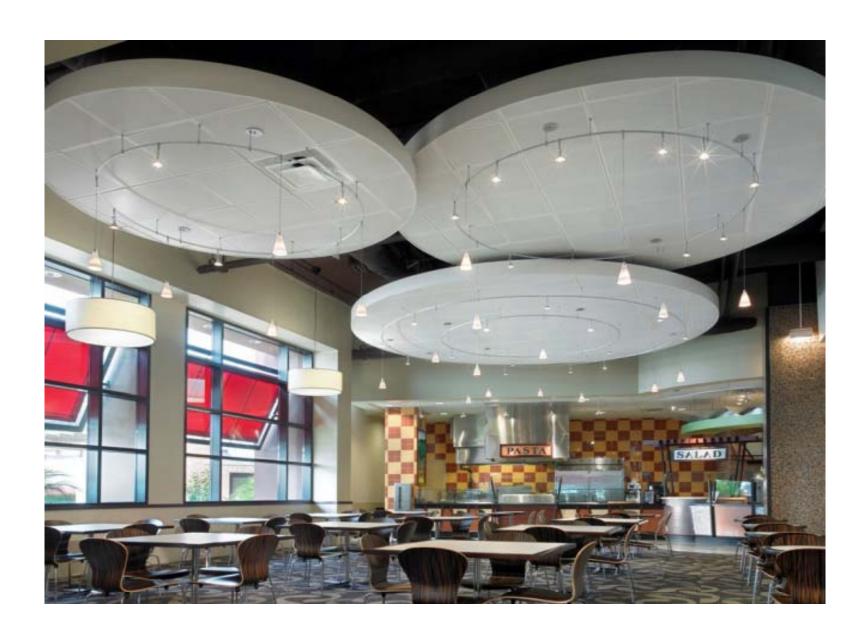




























BREAKFAST WITH THE STARS Tuesday 10th February 2009







FEATURING BOND UNIVERSITY- MIRVAC SCHOOL OF SUSTAINABLE DEVELOPMENT



6 star rating



Education PILOT

™green building council australia



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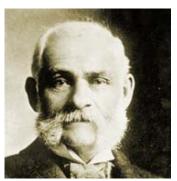






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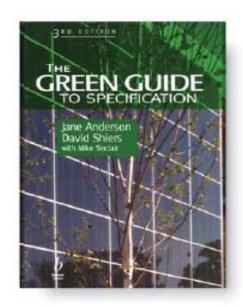
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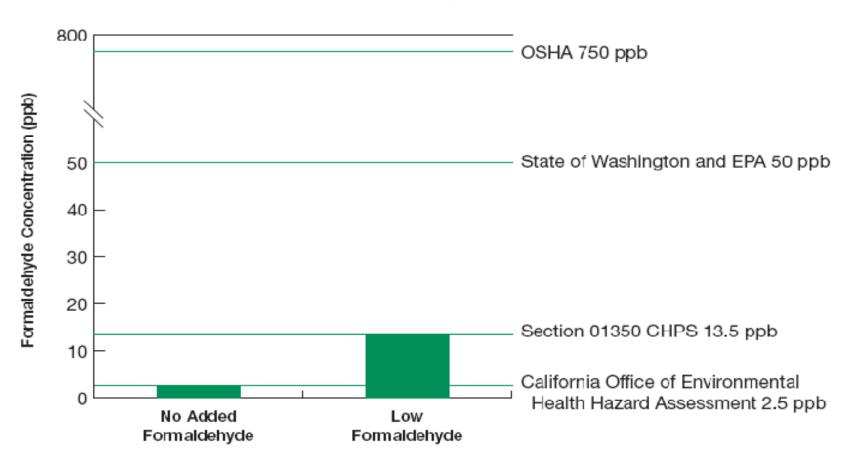


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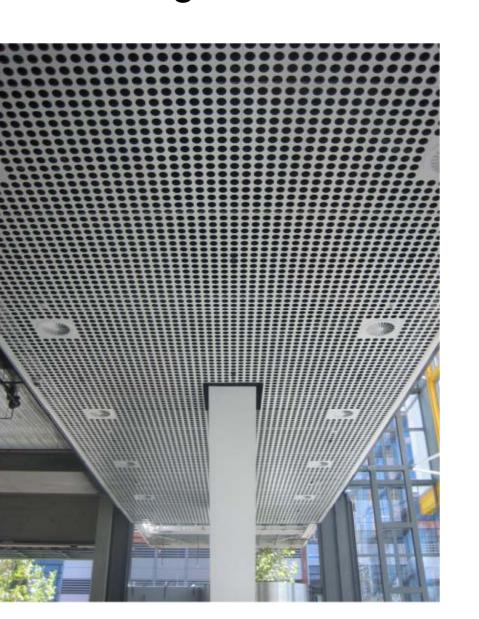
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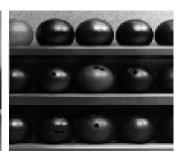


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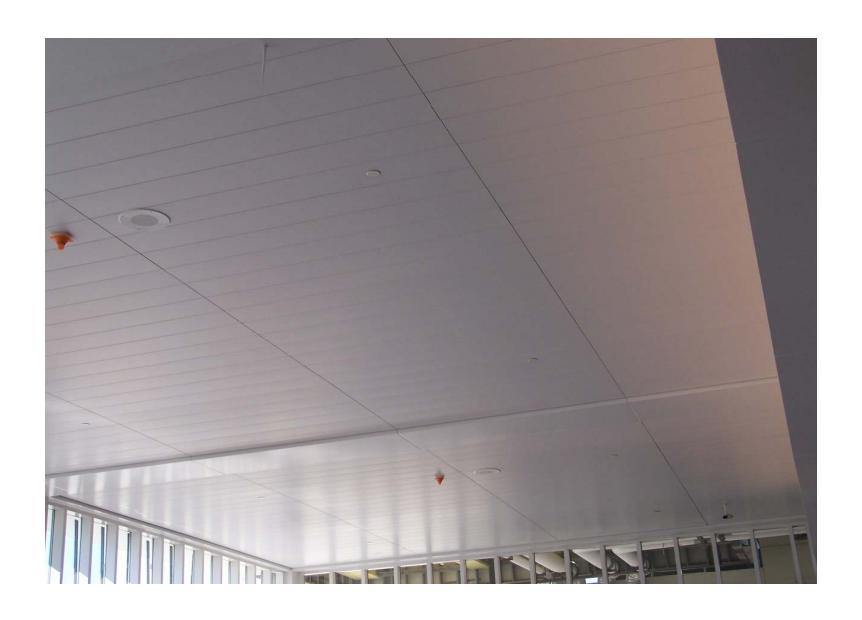
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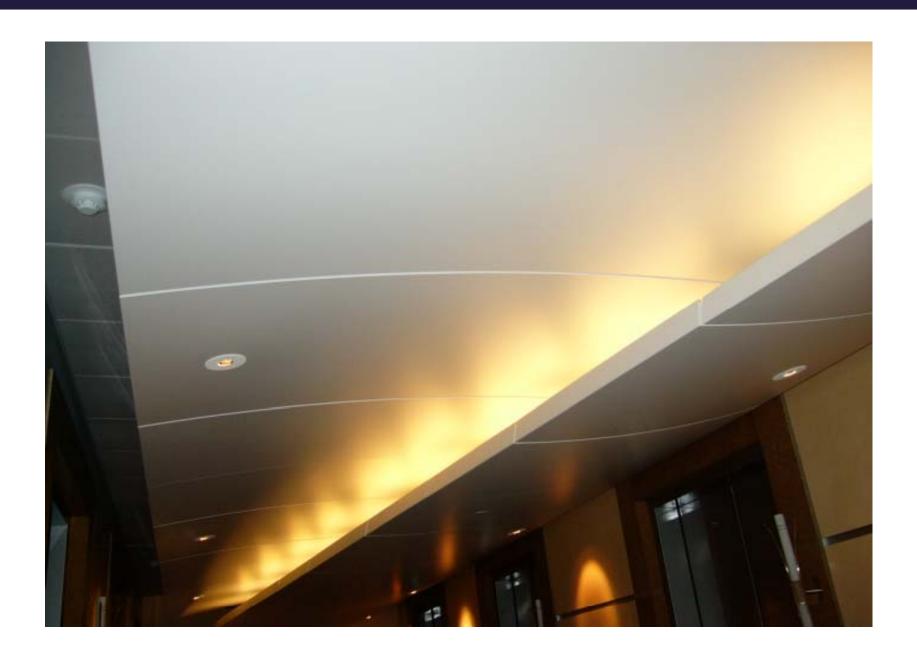












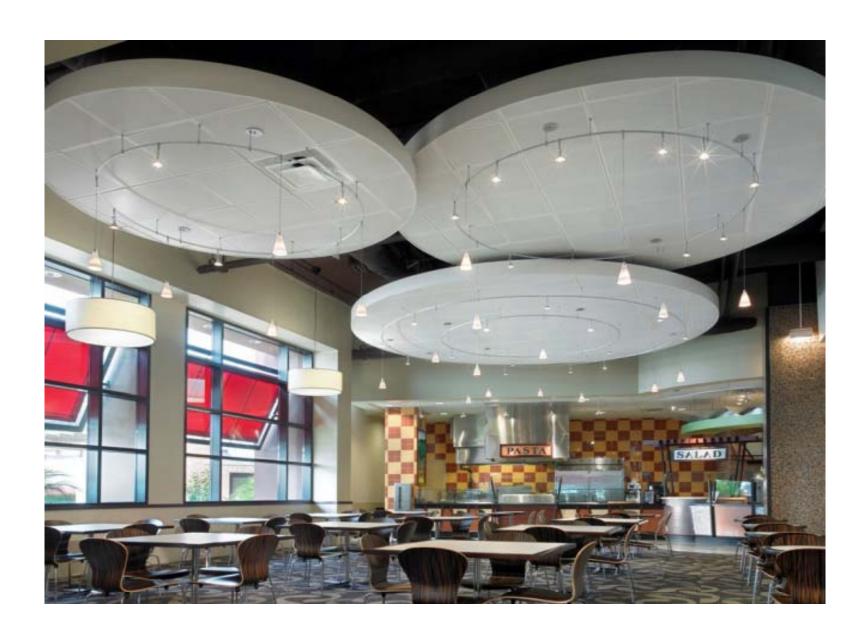




























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& Exhibition Centre 08-11 March 2009



Thank You!

You can download the podcast for this event at www.gbca.org.au