

Drywall is the most widely used building material for interior walls and ceilings worldwide. It is manufactured from gypsum (hydrous calcium sulfate) and is formed by sandwiching a core of wet gypsum between two sheets of heavy paper. When the core sets and is dried, the sandwich becomes rigid and strong enough for use as a building material.<sup>1</sup>

## DRYWALL AS WASTE

In 2005 Construction & Demolition (C&D) waste accounted for about 20% of waste in Calgary landfills, and drywall accounted for 20% of the C&D waste<sup>2</sup>. Disposal of drywall can pose unique problems, including producing toxic sulfur dioxide gas when incinerated or releasing hydrogen sulfide gas when landfilled, particularly in a wet climate.<sup>3</sup>

The Alberta Ecotrust's Ecohome processed their waste drywall onsite, using the drywall as a soil amendment during the landscaping phase.<sup>6</sup> Dealing with drywall onsite reduces the total construction waste significantly as drywall accounts for roughly 20% of the total waste created during the construction phase.

### Options for drywall waste: Reuse

- Gunitite Support
- Construction site reuse
- Donation

### Options for drywall waste: Recycle

- Soil amendment
- Composting
- Portland cement
- Reprocessed gypsum for new drywall
- Animal bedding

### Potential markets for recycled drywall

- Cement production
- Stucco additive
- Sludge drying
- Water treatment
- Flea powder
- Salty soil treatment
- Manure treatment
- Athletic field marker
- Grease absorption

### Did you know...

Due to Vancouver's climate, the city has banned drywall from its landfills. New West Gypsum Recycling, a local drywall recycler, has processed over 2 million tonnes of construction and renovation drywall returned to manufacturers for reprocessing.<sup>5</sup>

For a list of drywall recyclers please visit our [online recycling directory](#). For further questions please [email](#) Green Calgary's Commercial Environmental Services program or visit [our website](#).

1. Wikipedia, the free encyclopedia. <http://en.wikipedia.org/wiki/Drywall> (Last accessed Aug. 19, 2009)
2. CH2MHILL 2007. *Diversion Strategy for Construction and Demolition Waste in Calgary*. [http://www.calgary.ca/docgallery/bu/sws/diversionstrategy\\_finalreport.pdf](http://www.calgary.ca/docgallery/bu/sws/diversionstrategy_finalreport.pdf) (Last accessed Aug. 19, 2009)
3. Construction Materials Recycling Association. <http://www.drywallrecycling.org/> (Last accessed Aug. 19, 2009)
4. California Integrated Waste Management Board. <http://www.ciwmb.ca.gov/condemo/wallboard/> (Last accessed Aug. 19, 2009)
5. Saskatchewan Waste Reduction Council. <http://www.saskwastereduction.ca/resources/CRD/drywall.html> (Last accessed Aug. 19, 2009)
6. Alberta Eco Trust. [http://www.albertaecotrust.com/ecohome/waste\\_construction.html](http://www.albertaecotrust.com/ecohome/waste_construction.html) (Last accessed Aug. 19, 2009)