

Commercial Clean Gypsum Wallboard Waste Diversion

The First Step Towards Circular C&D Decarbonization

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Business as Usual - C&D Waste

- ▶ Construction is time and money
- ▶ Don't waste your efforts
 - ▶ Commingling C&D waste is easy
 - ▶ Owner already paying for waste
 - ▶ Get it out yesterday
- ▶ LEED/Sustainability projects
 - ▶ The “hassle” of documentation
 - ▶ “Just make it say 75%”
- ▶ Missing Accountability
- ▶ Risk Aversion
- ▶ Ignorance of Impacts

A Changing Market

- ▶ Landfilled C&D Waste = Carbon Emissions
 - ▶ Among many other problems...
 - ▶ How many landfills are left?
- ▶ The Rise of ESG
 - ▶ Owners beginning to prioritize carbon
 - ▶ Evolving project specifications
- ▶ Waste Audits?!?
 - ▶ The need for transparency
- ▶ Shifting Policy
 - ▶ Isn't clean GWB banned from landfill in MA?
 - ▶ The growth of EPR legislation



Summary

This section details specific Minimum Requirements and Targeted Ambitions for project teams to consider related to Waste. Some specific high impact-strategies for design and construction partners to incorporate include:

- ✓ Set *construction waste* diversion goals for projects early in design.
- ✓ Minimize construction and demolition waste through design strategies and utilizing fewer materials, where possible.
- ✓ Consider the project's end-of life *deconstruction* during the design phase.
- ✓ Coordinate materials circularity through reuse and salvaging materials.

E. Required Recycling, Salvage, and Reuse: The following may not be disposed of in landfills or by incineration:

Site Separation of C&D Waste

- ▶ Pilot to Process
- ▶ Project Types
 - ▶ Interiors vs. ground up
- ▶ Owner Buy-In
 - ▶ Here's how it can help you...
 - ▶ Corporate sustainability requirements?
- ▶ Starting Small
 - ▶ What can be diverted?
 - ▶ Signage
- ▶ Learning as we go
 - ▶ When in doubt, throw it out





Site Separating Clean Gypsum Wallboard

Is it Really That Much Harder?

- ▶ No, but it's different...
- ▶ Early Action
 - ▶ Contract development
 - ▶ Plan for logistics
- ▶ Field Staff Education
 - ▶ Supers, laborers, subcontractors, haulers
 - ▶ Explaining the “why” and asking “how?”
- ▶ Contamination
 - ▶ Reversing automatic tendencies
 - ▶ The continual need for commingled
- ▶ Hauler Communication
 - ▶ Where can this all go?
 - ▶ “I have a full load of GWB for pickup”



One Year of Results + Lessons Learned

► 2023 Stats

- 5 - Projects separating GWB offcuts
- 133.89 - Tons GWB diverted
- 3.89* - MTCO₂e

► Lessons Learned

- Field staff owns the process
- How many hampers?!
- Early education/planning are key
- “Don’t let perfect be the enemy of good”

► Cost impacts?

- No labor premiums?
- Bolstering hamper numbers

*Calculated using [EPA WARM Tool](#) - Version 15



Future Plans

- ▶ Refinement
 - ▶ Signs vs. flags
 - ▶ Are hampers the right choice?
 - ▶ Why is there SO MUCH GWB waste?
- ▶ Expansion
 - ▶ More than just LEED/sustainability projects
 - ▶ Additional waste streams
- ▶ Collaboration
 - ▶ Designing for waste reduction + deconstruction
 - ▶ Increased hauler awareness
 - ▶ Partnerships + Manufacturer EPR
 - ▶ More secondary markets/outlets



Thank you!

- ▶ Contact info
 - ▶ Michael Orbank - Michael.Orbank@STOBuildingGroup.com
- ▶ Groups
 - ▶ [Mass DEP Deconstruction Group](#)
 - ▶ CLF Boston/NE Reuse Group - clfbostonreuse@gmail.com
- ▶ Resources
 - ▶ [Interior Construction Site Separation](#) - Article for Construction Super Magazine
- ▶ Questions?

“Waste is a lack of creativity”

“The landfill doesn’t deserve these materials, our communities do”