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Construction professionals focusing on better ways of recycling construction and waste debris

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In today's world, we are finding that trash disposal options such as the recycle or reuse approach are becoming both a practical need and an overall environmental requirement. As landfills reach their capacities and closures continue nationwide, garbage and construction debris continue to flow and require some method and/or location for disposal. As such, there has been a huge push towards sustainable construction, not only from the USGBC perspective, but also by local and state agencies.

Each individual's commitment to a sustainable future helps ensure that homeowners and contractors alike contribute to the neighborhoods and communities in which they live and work. While most people understand the concepts of recycling and reusing, there are a myriad of detailed ways in which construction professionals can reduce their environmental footprint.

Construction professionals are now focusing on better means and methods of recycling construction waste debris. We constantly find ourselves searching for innovative ways to reuse and recycle construction debris and divert the waste from local landfills. These concerted efforts benefit the environment by not only minimizing carbon dioxide emissions (better known as greenhouse gases), but also by reducing the use of natural resources. We feel the investment of time to fully understand all the aspects of each project demolition and waste stream components are critical to the project's construction waste program.

As an example of planning and assembling a construction waste program, we have recently completed a 255,000 s/f LEED Gold cGMP global distribution center for a Massachusetts biopharmaceutical company. One of the many innovations and means to reuse materials was the complete utilization of the project's roof demolition/replacement. The existing building roofing system consisted of EPDM, foam, and fiberboard with a river-washed stone ballasted system. The EPDM was recycled, shredded, and utilized as playground mulch. The foam board was ground and recycled into new foam insulation and the stone ballast was reused on-site to support stone mulch around the building perimeter.

Through innovative recycling efforts, the team was able to recycle 97.38% and divert over 255 tons of construction debris from local landfills. Ultimately the project saved an estimated 11,223 barrels of oil (6,093 MMBTu) that if not recycled, would require manufacturing new material. These are just a few small examples of how thinking outside the box can breathe new life into old materials and pave the path to a more sustainable future.

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