Contractor's Guide to Construction Debris Removal

JUNK KING®

AMERICA'S GREENEST JUNK REMOVAL SERVICE

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1. Construction Debris Removal - An Unwanted Task

As a contractor, cleaning up job sites is an ongoing task. Trash, debris and other waste materials need to be removed and hauled off-site. And, the more the debris, the more often it needs to be removed.

Contractors routinely generate waste that is referred to in the industry as Construction and Demolition, or C&D, debris or waste. This consists of waste materials that are generated during new construction, renovation, and demolition of buildings, roads, and bridges.

All construction – whether it's large commercial projects or smaller residential jobs – creates debris and therefore requires construction debris removal. Trash from material packaging, cutoffs of material, scrap, demolition debris, are the normal by-products of a building project. Large construction companies typically have vehicles and a crew to take care of cleaning and hauling their debris.

But not every contractor can or wants to be tasked with construction debris removal. For them, cleaning all this up, hauling it out, and disposing of it is not really a part of construction. It is a time-consuming activity that takes resources away from the production side of their job - building on the job site!

Except that someone's got to do it!

2. What Makes Up Construction Debris?

For many contractors, they produce more or less the same mix of construction debris and trash project after project. Occasionally they may encounter an excessive amount of old concrete or masonry that has to be disposed of. Or there may be a demolition stage to their project that produces a large amount of debris to haul off.

Larger construction firms, on the other hand, may routinely generate tons of construction debris year after year, producing massive amounts of waste that must be hauled off and disposed of, or possibly reused or recycled depending on the material.

So how much C&D waste is there?

a. Tracking the Source

The actual volume of construction debris can be broken down into four basic categories:

i. Renovation

ii. Residential Demolition

iii. Non-residential Demolition, and

iv. New Construction.

The amount of C&D waste produced annually in this country totals almost 200 million tons, **with residential renovation and non-residential demolition generating over three quarters of the total.**

It has been estimated by some sources that the bulk of construction debris in the U.S. is generated from commercial demolition projects. Oftentimes these are preliminary stages before new construction or renovation of commercial sites can take place. Interestingly, non-residential, or commercial construction only accounts for 3% of the overall C&D debris generated annually.

The breakdown looks like this:

- Non-residential demolition 39%
- Residential renovation 22%
- Non-residential renovation 19%
- Residential demolition 11%
- Residential construction 6%
- Non-residential construction 3%

b. What Makes Up C&D Waste?

Typically, C&D debris contains bulky, heavy materials that include:

- Concrete, wood, and asphalt (from roads and roofing shingles)
- Gypsum (the main component of drywall)
- Metals, bricks, glass, and plastics
- Salvaged building components, such as doors, windows, and plumbing fixtures

The average composition of construction debris

Wood	27.4%
Asphalt/Concrete/Brick/Dirt	23.3%
Drywall	13.4%
Roofing	12.0%
Metal	8.8%
Cardboard/Pape	2.7%
Plastics	0.5%
Miscellaneous	11.9%

3. A Case for Reusing Materials

The good news is that most C&D products, such as concrete, can be recycled into new materials, saving money for builders, contractors, and home renovators. Part of the beauty of recycling your construction concrete waste is the convenience. But, just as important, is the very real impact of having your concrete debris recycled and reused.

a. Diverting the C&D Waste Stream

The trend in the United States, Europe, Canada and other nations has been to aggressively pursue policies encouraging and, in some cases, requiring the diverting of certain solid waste materials from the waste stream. Concrete and masonry, as well as drywall (gypsum) are prime examples of this movement.

There are a number of good reasons for adopting a construction debris management policy that seeks to minimize the actual volume of waste directed to a local landfill.

i. Reuse of durable building materials

One of the advantages of recycling and reusing construction debris is that your waste material will find new life as repurposed products while reducing the impact on existing landfills. Not only concrete, but drywall board, or gypsum, can find new life as a variety of products. Wood and metals are also prime candidates for recycling and reuse.

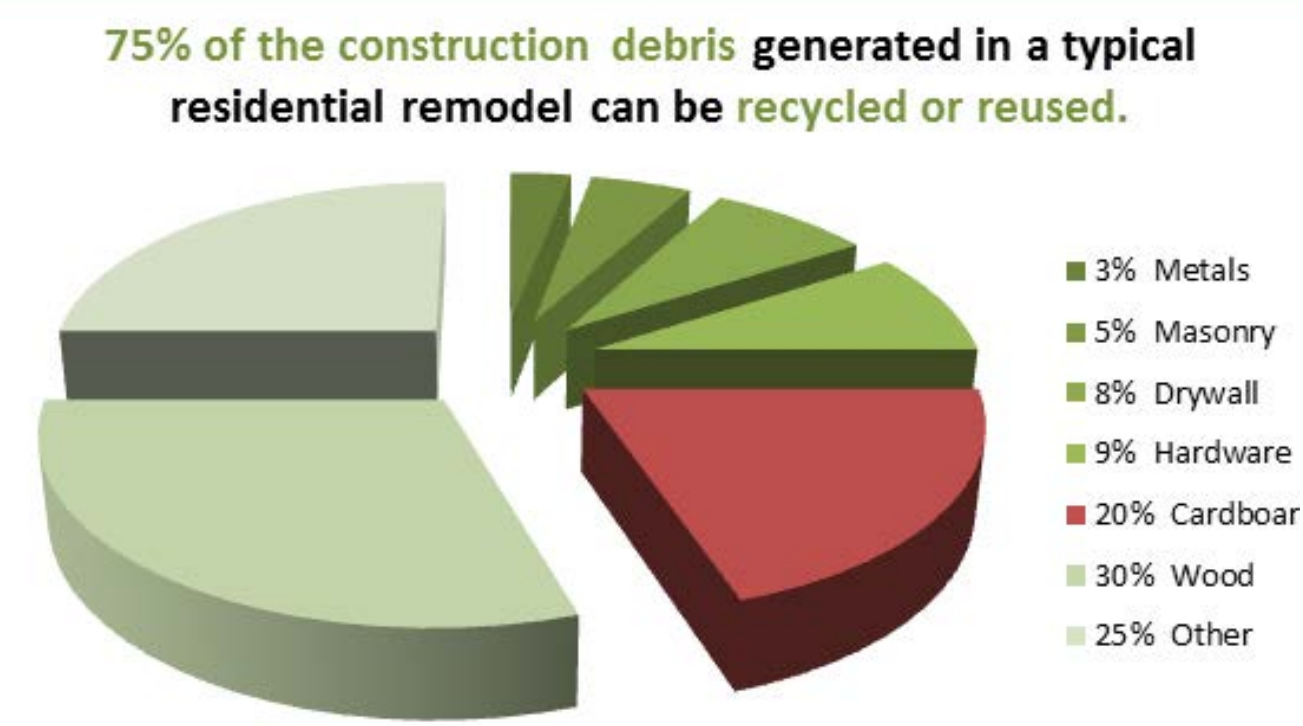
ii. Elimination of high landfill fees

A real cost consideration for contractors is the ever-rising landfill fees. These fees vary depending on your location, the availability of landfill space, and local regulations. However, fees for dumping your concrete waste into a landfill, for example, can range from $60 per ton to as much as $300 per ton or more. At

150 lbs. per cubic foot, it only takes about 14 cubic feet to make a ton of debris. By opting for recycling, the transfer fees can be extremely low and even nominal for the donor.

iii. **Contributes to the production of lower cost recycled aggregate products**

In part, because of a number of state and regional laws and an increased demand for these types of products, recycled aggregate products are on the rise. The source material for these lower-cost and efficient construction alternatives is waste concrete, brick and masonry debris. An additional incentive for contractors is the potential for certain tax advantages when donating these materials to qualified 501c.



(Source: The National Association of Home Builders)

b. Recycle and re-purpose materials and waste debris wherever possible

Your local agencies, as well as Federal and State agencies, have specific requirements for the proper handling and disposal of various materials and substances. This means that whoever is ultimately tasked with removing and disposing of construction debris, needs to be knowledgeable in this area. Professional firms will make use of the proper disposal sites and methods, while recycling as much of the materials as possible.

The three most common materials the typical contractor is going to have for possible reuse or recycling is going to be concrete and masonry rubble, wood, and metals.

c. Recycled Concrete Finds New Life

The most common uses for the almost 140 million tons of waste concrete that is recycled in the U.S. each year include:

- Road Building
- Concrete Aggregate
- Riprap
- Landscaping Products
- Gabion Construction

4. Removing and Disposing of Construction Debris

All construction trash is not created equal...

We have already considered the types of debris and waste materials that have the potential for reuse and recycling. In addition, a contractor has to take into consideration safety and capability issues around removing and disposing of construction trash.

a. Trash Hauling as Hazardous Duty

Concrete disposal, for example, is difficult and even dangerous because it is heavy and unwieldy. Even transporting concrete debris can be a challenge. In order to reduce the debris to a manageable size, breaking and jackhammering is often required. This is time consuming and labor intensive. In addition, there is often re-bar and other metals involved, as well as potentially hazardous waste materials attached to or mixed in with concrete debris.

While most of the debris produced in a typical project may not normally be classified as hazardous material, the rules defining those types of materials can be confusing. According to one source the EPA "defines hazardous wastes in several ways, one of them being whether or not it is what is called a "characteristic" hazardous waste. Does the waste meet certain stated characteristics?"

Based on standards established by the EPA, if a material has a pH greater than 12.5, it is considered a corrosive material and, by definition, a hazardous material. Even concrete has a Material Safety Data Sheet (MSDS) due to its potentially corrosive nature (high pH) and the need to take proper precautions when placing concrete on a jobsite.

This means there is a distinction between hazardous waste and hazardous material. Because of its pH levels, concrete can be classified as a hazardous material. But if it is being reused, repurposed, or recycled it is not a waste product and, therefore, is not hazardous waste. However, this isn't the case with all construction trash

i. Hazardous Waste and Debris Removal Firms

Even the businesses under construction or demolition can indirectly generate hazardous waste debris. Regardless of the source, this is not the kind of junk you can just toss into the trash can or commercial dumpster. And hauling it yourself can present of a number of problems. Fortunately, there are professional firms that can make this task simple and efficient for your business.

Construction firms commonly produce a wide variety of debris materials that must be removed and disposed of in accordance with hazardous waste disposal rules. And the list of common construction debris listed as hazardous wastes is quite long. Here is a short list of the more common ones.

ii. Common Construction Trash Considered Hazardous Waste

While this is not an exhaustive list, it represents most of the more common materials that show up in various business operations and on construction sites. Some of these items are considered "Universal Waste" by the state of California. This simply means that these materials can be handled and disposed of in a manner that differs from most other hazardous waste materials.

- Aerosol cans
- Asbestos-containing materials
- Empty containers or drums
- Lead-containing materials

- Mercury-containing light bulbs and lamps
- Mercury-containing switches and relays
- PCB-containing light ballasts
- Oil-based paint
- Sludge from various solvents
- Paint thinner
- Shop towels and rags contaminated with hazardous waste
- Sanding dust
- Treated wood

In addition, certain conditions apply that may further exempt a company from the Universal Waste regulations, as well. For example, in California contractors may fall under this exemption according to the California Department of Toxic Substances Control:

A Conditionally Exempt Small Quantity Universal Waste Generator (CESQUWG) is a universal waste generator who produces less than 100 kilograms (220 pounds) of RCRA hazardous waste, including universal waste that is RCRA universal waste and less than 1 kilogram of acutely hazardous waste in a calendar month. (RCRA hazardous waste is hazardous waste that is regulated under the hazardous waste regulations adopted by the U.S. Environmental Protection Agency.)

iii. Why Outsource Construction Debris Removal

While your projects may not generate substantial volumes of debris, nor produce alarming amounts of hazardous waste, there are still a number of good reasons to consider outsourcing your debris removal work to a professional firm. Aside from freeing up your own resources for more productive tasks, you can know that your waste and debris removal will be handled quickly, safely, and efficiently.

With an outsourced hauling company a contractor can get both site clean-up services as well as hauling of debris. It's one thing to pick up construction waste and trash to be hauled off site. It is another thing altogether to clean up a site in the process. While it is not expected that a debris hauling company is going

to dust, vacuum and provide complete site restoration, a professional firm will ensure that the site is left in a state that is safe and clean.

The ideal set up for most construction projects is to schedule a series of waste and debris clean ups and removal. And by making use of a reliable professional firm the work can be scheduled and carried out with a minimal amount of disruption to the progress of the job. In addition, outsourcing this task allows the contractor to keep his crew working on the productive aspect of the project.

5. The Next Steps for Contractors

Knowing that your concrete can be disposed of safely, and potentially recycled and reused, is great. However, getting it off-site and hauled away is still a potentially costly and time-consuming proposition especially if you choose to do it yourself.

On a very small project such as a one room remodel or even a minor addition to a structure, the debris generated may be easily dealt with. But it doesn't take a much bigger project to begin to see a substantial increase in waste, trash and different types of debris material that has to be managed.

Smart contractors and project managers know that every phase of a project must be closely managed, processes streamlined, and resources optimized. What is often left out of these equations is construction debris. But in order to maintain an overall goal of cost-effectiveness, this is a function that should be equally well-managed and planned for.

a. Three Ways to Optimize Your Debris Disposal

i. Using designated debris containers/bins

Too often contractors and sub-contractors overlook the efficiency of dumpsters or bins for holding material debris and waste. In addition to the safety factor of keeping cut-offs and other debris littering a site, designated containers allow you to separate recyclable materials from hazardous materials, improving waste management and recycling.

ii. Weekly clean-ups with designated personnel

Creating an actual plan with a schedule as part of the construction process is an efficient approach for disposing of site debris. Having the same members of your crew tasked with regular clean up at set times helps to ensure consistent and quicker clean up, as well. The plan and schedule should include your sub-contractors at every phase of the project.

iii. Hire a professional firm for hauling and disposal

A more strategic alternative and one of the best ways to minimize your own costs in terms of wages, fuel, fees and time lost in production is to establish a longer term relationship with a professional junk hauling company to load, haul and dispose of your construction waste. This allows you to focus on getting your projects completed while knowing that your construction debris, whether hazardous or not, will be treated and disposed of correctly. And, as a bonus, you may actually be spending far less by outsourcing this work.

6. Summary

As a contractor, you have a number of possible choices for debris removal from your job sites:

- ✓ **Hiring a local hauler -** An option we have noticed a few times is where contractors outsource their construction debris removal to a private individual with a truck. This option frequently becomes very costly as the risks substantially outweigh the gains. Issues to consider include insurance, license, safety, injuries, potential for damage or theft, correctly disposing of hazardous material, etc. In other words, the possibility of getting it done less expensively could easily end up costing you far more.

- ✓ **Using your own crew and vehicles -** While this may seem to be a less expensive option, removing and hauling construction debris is time consuming, potentially dangerous, and often involves legal considerations when cleaning hazardous waste materials from a construction site. As a contractor you have to ensure that your construction debris removal crew is up to date with the latest rules and regulations pertaining to hazardous waste removal, recycling and dumping of construction waste.

- ✓ **Hiring a professional firm -** Outsourcing your construction waste disposal to a professional and licensed firm such as Junk King, may be your best long-term solution. With this option you can rest assured that any disposal of construction waste will be handled safely, quickly and properly. And, because many components of construction waste are great candidates for recycling, you are also assured that your debris will be put to the best uses possible. Professional junk removal companies such as Junk King has the experience, the equipment, and the proven systems to ensure that your construction waste disposal is done quickly, safely and properly.

7. Author

Julian Torres, Director of Operations, Junk King Franchise Systems

A big believer in being a team player, Julian supports strong work ethics.

Julian helps residential and commercial customers understand the importance of using Junk King's services, educates them on the differences of recycling, donating and disposing of certain debris. Julian provides valuable information for a good junk removal experience.

Julian is no stranger to the junk removal business, having spent 3 years as a Junk King driver and 5 years as an operations manager, which taught him the importance of having good communication, customer service and valuable support advice.

Julian Torres is a Director of Operations with Junk King Franchise Systems. In this role, Julian looks after franchisees operations, providing all aspects of the operations training, including efficiencies, logistics and customer support.

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8. Related Articles

1. Construction debris recycling
2. 5 Tips to Cost Effective Construction Debris Disposal
3. Construction Trash Removal Facts (hyperlink is:

