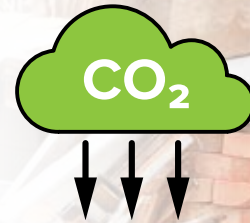


CONSTRUCTION & DEMOLITION WASTE DIVERSION TOOLKIT



Burnaby's Construction and Demolition Bylaw requires that at least 70% of demolition waste be diverted to approved disposal and recycling facilities for all structure types. We've made this change as a part of our Climate Action goals to protect our environment and divert valuable resources from landfills. Increased recycling helps to control the long-term costs of disposal and reduces greenhouse gas (GHG) emissions during the redevelopment process. This toolkit is a step-by-step guide of everything you need to submit to obtain your demolition permit, which will help save you time and reduce your demolition costs.



What you need to submit

Before demolition

Create an estimate of the approximate amounts of demolition material that can be salvaged, recycled, and disposed.

Complete the Waste Diversion Plan application and submit it with your demolition permit application, and all applicable fees and deposits.

Submit a **waste disposal and recycling services plan:**
building@burnaby.ca



During demolition

Collect and file all your receipts from resale, recycling and disposal facilities.

Separate waste and recyclables from waste going to a disposal facility and recyclables diverted for reuse.



After demolition

Submit a **compliance report** for material reuse, including copies of your receipts or signed forms from all salvagers:
climateactionandenergy@burnaby.ca

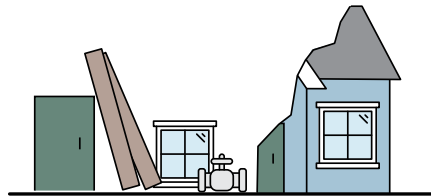


Salvage and deconstruction

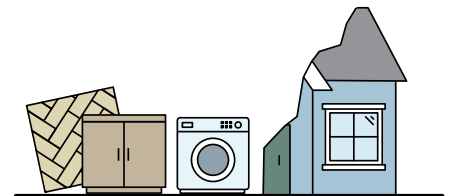
Your building likely contains valuable materials that can be recycled or reused. Taking care to separate these materials from waste can offset the cost of your project, and ensure that you achieve the 70% diversion rate you'll need to receive the full deposit back. Before you begin, consider how your project can take advantage of alternatives to creating waste, including:



Selling or donating
your intact structurally-
sound building



Disassembling
your building to recover
valuable building materials



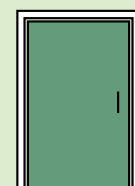
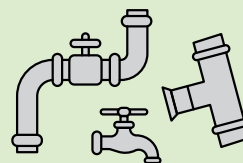
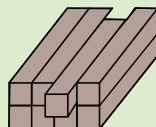
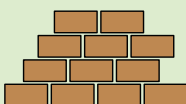
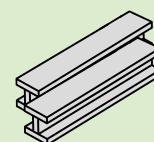
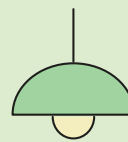
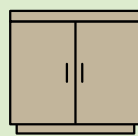
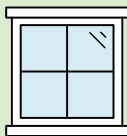
Salvaging
valuable, non-structural
components during
demolition (e.g. cabinets,
flooring, appliances)

Common deconstruction and salvage materials include:

dimensional lumber
heavy timbers
steel beams and studs
wainscoting
insulation

siding
heating ducts
electrical equipment
brick and block
light fixtures

plumbing fittings
faucets
interior doors and frames
closet doors
cabinetry



Creating your waste diversion plan

Your waste diversion plan will give our staff the answers to some important questions:

What kinds of materials will be disposed of in your demolition?

How much waste and recycling material do you expect your demolition to yield?

How do you plan to separate waste from recycling and **which approved facilities** are your demolition materials going to?



STEP 1 Create an estimate

Based on the size and type of your project, you can estimate how much of each type of material you can expect to account for.

Estimating waste generation

Material type-demolition	Quantity	lbs.	kg
Wood: floor (without concrete topping)	1 sq. ft.	10	4.5
Wood: floor (with concrete topping)	1 sq. ft.	20	9
Wood: floor (exterior)	1 linear foot	25	11.4
Wood: floor (interior)	1 linear foot	20	9
Wood: roof	1 sq. ft.	5	2.2
Concrete slab (4" thick)	1 sq. ft.	50	22.7
Asphalt	1 sq. ft.	50	22.7
Brick/masonry	1 sq. ft.	50	22.7
Spread footing (20" wide)	1 linear foot	265	120.5

Use this table to get started with a ballpark figure.

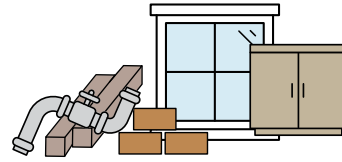
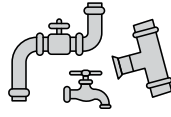
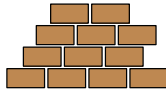
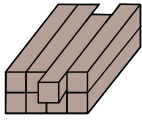
Volume to weight conversion

Mixed C&D	Quantity	lbs.	kg
Mixed C&D (structural)	1 cu. yd.	500	227.3
Mixed inerts (concrete, brick, dirt, asphalt)	1 cu. yd.	2000	909.1
Separated inerts	1 cu. yd.	2000	909.1
Wood	1 cu. yd.	375	170.5
Metals	1 cu. yd.	906	411.8
Roofing materials	Quantity	lbs.	kg
Asphalt shingles/composition	1 cu. yd.	419	190.5
Asphalt shingles/composition	1 sq. ft.	3	1.4
Asphalt tar roofing	1 cu. yd.	2919	1326.8
Wood shake/shingle roofing	1 cu. yd.	435	197.7
Wood shake/shingle roofing	1 sq. ft.	2	0.9
Tiles (concrete roofing)	1 cu. yd.	10	0.9
Tiles (concrete roofing)	1 sq. ft.	2900	1318.2
Yard waste	Quantity	lbs.	kg
Green waste (shrubs, turf, etc.)	1 cu. yd.	500	227.3
Yard trimmings	1 cu. yd.	108	49.1



STEP 2 Choose a collection type

Next, it's time to decide on how your waste and recyclables will be sorted on-site and hauled away. Your decision will be influenced by the amount of space you have on-site for bins and the ease or difficulty of separating materials at each step in the process.



Option 1: Source separation

Pros

- lower tipping fee
- higher recycling rates
- cleaner job site
- your recyclables can be sold

Cons

- more time spent on sorting
- more bins or separate pick up required on site

Option 2: Comingled collection

Pros

- fewer bins required
- less sorting required

Cons

- higher tipping fees at recycling and disposal facilities
- lower recycling rates

Your project can use both approaches at different points in the process. For example, place dedicated bins for wood, drywall and scrap metal to help separate material during the demolition process, then use comingled bin during the rest of the project. Dedicating a portion of the site (e.g. the garage) to store items that can be sold as salvage is an easy way to keep the site tidy and maximize your return.

STEP 3 Create a waste disposal and recycling services plan

Download the form at Burnaby.ca/DemoWaste

Be sure to include the contact information for the third parties working on your project, including:

» waste haulers » used building material retailers » licensed recycling and disposal facilities

STEP 4 Choose a recycling manager

Finally, it's time to designate a person to be responsible for implementing your service plan and monitoring the site for compliance. For larger projects, this could be a team of several people. This position will be responsible for:

On-site setup

Your manager should place recycling bins close to where the materials are being pulled out. Label each bin clearly with the material type it is for. It's also a good idea to place garbage bins next to recycling bins to prevent waste materials from ending up in your recycling; when there's only one bin, crews will often put everything inside it.

Record-keeping and reporting

Make sure to collect and file all recycling and disposal waybills and invoices.

Within 90 days after your demolition, you'll need to submit:

- ✓ receipts for payments and donations
- ✓ recycling verification letters from facilities with the percentage of waste recycled/reused versus disposed
- ✓ waybills
- ✓ waste transport manifests

