Backfill

Job-Site Grind

Many builders talk about sustainability, but John Suppes has actually put his money where his mouth is by purchasing an $80,000 waste grinder (1). The owner of Clarum Homes in Palo Alto, Calif., uses the grinder to convert waste on his construction sites into usable construction material.

Everyone on Clarum Homes' sites is required to segregate waste by type and pile it at specified locations. The hvac contractor takes his scrap back to the shop and puts it in a dumpster provided by a metal recycler. Crew members collect cardboard and haul it to a recycling company. Most of what's left becomes grist for the grinder, which turns lumber into landscape mulch, drywall into soil amendment, and roof tile, stucco, and masonry into sub-base material for driveways.

The grinding process works like this: First, an operator loads waste into the hopper (2). Then he closes the lid, fires up the diesel engine, and hits the switch for the hydraulic ram. The ram pushes the waste into a spinning drum studded with scary-looking teeth (3), which pulverize the material (4) into pieces small enough to drop through a sieve — a thick steel plate with holes in it. Finally, a conveyor carries away the chips (5). The operator can change the size of the pieces by switching to a sieve with smaller or larger holes. Nails and metal are separated from the waste by a magnet that holds them on the belt until they fall into a collection bucket.

Suppes says customers like knowing that most of the waste from their projects is diverted from landfills. As for Suppes, he likes saving on tipping fees and the recycling fees assessed by many of the towns where he works. And he also likes making a few extra bucks by renting the machine's services to other builders. — *David Frane*