



# “Tuff Curb Technology”

## ...A Stronger and Durable Landscape Curb For Minnesota...

- \* **Holcim Portland Cement** - One of the most widely used types of basic building materials in the United States. It is a sustainable material that is durable, dependable, and suitable for a variety of concrete construction applications. It is formulated to provide optimal strength characteristics meeting ASTM C 150 Type I-II.
- **Sand** – Washed concrete sand is used because it contains light gravel aggregate for a stronger curb. Mason sand is too fine and does not contain a light gravel aggregate.
- **Fibermesh** – Half inch polypropylene fibers are mixed in to each batch of concrete at a ratio of 1.6 pounds per cubic yard to inhibit shrinkage and hairline cracking. Fibermesh also increases the tensile strength of your curb.
- **Air-Entrainment** - We add air-entrainment to our concrete. Millions of microscopic air cells per cubic foot. These air pockets relieve internal pressure on the concrete by providing tiny chambers for water to expand into when it freezes.
- **Cable “Re-Bar” Protection** - We run a 1/8 inch galvanized aircraft cable through our curb increasing tensile strength by 1800 psi. The cable improves strength and durability and minimizes shifting and/or separation during freeze/thaw cycles.
- **Exact Amount of Water** - To produce workable slurry on surface of curb and to maintain “0” slump for extrusion precision as well as strength.
- **Experienced Curb Machine Operator** – The operator is consistently putting pressure against the curb machine creating stronger compaction. The operator is also making sure the correct amount of concrete is being extruded through the mold to produce maximum mass and strength.
- **Skilled “Finish” Craftsman** - trowel out any imperfections and then compact the landscape curb with firm, commanding strokes thus producing a higher p.s.i.
- **Control joints** – are cut approximately half way through the curbing every 2 – 3 feet to allow expansion and contraction from seasonal changes.
- **Cure and Seal** – Solvent based sealant. Aids in proper curing of concrete curb as well as protection from color fading and staining. For best results a solvent based sealant should be applied on an annual basis.