



MC550 Curb Mix Information

Because available mix and job conditions will vary from one area to another, the following concrete and asphalt mix specifications can be used as guides to determine exact mix requirements for your area.

A. Aggregate / Sand Information:

The size of stone and the amount of stone in the mix is very important. It is the stone that the auger pushes. A mix that has stone of a large enough size and quantity, will move through the Curbilder easier and quicker than a mix that does not. A Mix with the proper size and quantity of stone puts less stress on the drive system and the wear components. Recommended minimum size of stone is 3/8". The larger the curb size, the larger the stone should be and the more stone there should be. Maximum stone size is 3/4".

The larger the stone and the more stone there is in the mix, the more finish work may be required. But, the larger the stone and the more stone there is in the mix, the easier and faster the mix will move through the Curbilder. The easier the mix moves through the Curbilder, the longer the wear life of the wear components.

As the content of stone is increased the content of sand should be equally decreased. Typically a blend of Sand 60% & Stone 40% is a good starting point.

A mix that has stone of too small a size and quantity, and or a high sand content, will pack rather than move through the Curbilder.

With this kind of mix the auger will spin many more times to move the mix. This extra spinning will cause excessive wear to all of the wear components. This kind of mix can wear out an auger, compaction tube, or curb form within 1500 to 2000 lineal feet of curb. This kind of mix will also cause the Curbilder to move very slow or not at all.

NOTE: Suggested mix specifications for both concrete and asphalt are on the following pages.

B. Recommended Mix Specifications:

Concrete curb

For one cubic yard of concrete:

0" to 1" slump

- Cement: 660# (7 sacks)
- Sand: 1,600 #, 5% moisture
- Aggregate: 1,400 #, 3/8"
- Water: Approximately 15 gallons

Keep loads to 3 yards when possible. Water content varies according to materials and moisture content. Larger loads and higher air temperatures may require more water to maintain slump. Add water at job site only. Work materials to dry side. Retardant should be used at the manufacturers recommended minimum amount. This amount may be adjusted based on local conditions. Air entrainment should be added at approximately 5%. This amount may be adjusted based on local conditions.

Asphalt curb

Aggregate graduation	
SIEVE SIZE	PASSING % BY WEIGHT
3/4"	100
1/2"	86-100
3/8"	75-100
No. 4	60-80
No. 8	45-60
No. 50	18-30
No. 200	2-15

Aggregate should be thoroughly washed and dried. Virgin mix is recommended. Liquid asphalt content by weight for virgin mix should be 8%. If using recycled mix and the curb does not stand the liquid asphalt content will need to be raised. Recycled mix usually has too many foreign substances in it and it usually does not have enough liquid asphalt in it.

The liquid asphalt content may also have to be raised if the mix has slag, unwashed aggregate, or other absorptive materials in it. Working temperature needs to be 200 to 270 degrees Fahrenheit.

C. Mix required for a given curbform

Use the following calculations to help determine the quantity of mix required for any given curb form:

ASPHALT:

$$\frac{1950 \text{ Lineal Feet/Ton}}{\text{square inch area of curb form}} = \text{lineal feet/ton}$$

CONCRETE:

$$\frac{3700 \text{ Lineal Feet/Ton}}{\text{square inch area of curb form}} = \text{lineal feet/cubic yard}$$

NOTE: (1) See **Auger Sizing Chart** to determine the square inch area of the curb form.
(2) Refer to Curb Form Design Sheets for Curb Shapes and Data.