One of the key factors that determines the performance of diamond saws and drill bits is the type of aggregate in the concrete or asphalt being cut.

“Aggregate” is defined as the stone, gravel and sand used in paving materials like concrete and asphalt. Aggregate may be crushed or uncrushed. Crushed aggregate may be limestone, granite, sandstone, traprock, etc. Sand and gravel are typically found in natural deposits, like riverbeds, stream courses or lake basins.

Aggregate is generally divided into “fine aggregate” (passes through a No. 4 sieve, 0.187” square opening) and “coarse aggregate” (almost all of which is retained on a No. 4 sieve and may range in size up to 3” particles).

While recognizing that aggregate size and type can change completely in a short distance on a given project (say a highway), it is generally true that aggregates are similar in certain geographical areas. This is primarily due to local availability of one type of material and the prohibitive cost of importing anything else.

This aggregate map is not intended, nor should it be used to precisely define all aggregate in a given area. Instead, it is published as a “general guide” to the predominant aggregate hardness (as it relates to sawability) likely to be encountered in the areas defined by the various colors.

It should also be pointed out that any aggregate can be sawed. However, the cost of sawing is usually directly related to aggregate hardness and size. This map is simply a reference tool to provide a general sense of aggregate similarity in various areas of the country. A brief description of the predominant aggregate in each state follows.

**AGGREGATE CLASSIFICATION MAP OF THE UNITED STATES**

- **Soft**
- **Medium-Soft**
- **Medium**
- **Medium-Hard**
- **Hard**