High Density Urethane (HDU) is a recent development within the sign industry. Within the last decade this product has begun to overtake conventional wood products such as redwood and cedar. HDU has established such popularity for the same reason all products do - superior quality and performance.

Sandblasted signs made of HDU has proven to outperform natural wood sandblasted signs. There are several factors that make this statement true.

- **HDU signs withstand environmental elements far greater than wooden signs.**
- **Larger signs can be created out of one single piece of HDU while wooden signs would need to be spliced together. Due to contraction and expansion of natural wood in outdoor environments, this sliced seam will eventually separate.**
- **Material costs of HDU have decreased in recent years due to increased competition within the manufacturer’s market while costs for quality wood materials have become unstable due to a decline in availability of prime wood.**
- **Due to the uniformly dense cell structure of the HDU, it is less vulnerable to be broken when struck. Weathered, brittle wooden signs become more likely to snap at a weak point.**
- **More options in sandblasting textures and carving techniques are available with HDU because of the consistency of the product.**
Why is High Density Urethane replacing redwood in the Sign Industry?

Redwood and Cedar have long been standard substrate options for sandblasted signs. However, a new standard in long term customer satisfaction has led the sign industry to develop a better material, high density urethane...

Natural woods such as redwood or cedar are composed of a variation of grain densities. This is what establishes the sandblasted sign effect. The soft grain is blasted away leaving behind the raised hard grain. Ironically, this characteristic that defines the sandblasted sign is also it’s greatest flaw.

Natural woods are greatly affected by weather conditions, such as humidity and temperature change. The soft grain and the hard grain of the wood expands and contracts at different rates, thus causing the wood and the painted surface to rapidly disintegrate.

As you can see in these pictures, paint along these seams in grain density is pulled apart, flakes off and the raw wood beneath is exposed to the elements. Not long after this paint falls into disrepair, the wood itself begins to split and crack and fall apart.

This redwood sign has been exposed to moderate Midwestern weather conditions for merely five years.