



PINE HALL BRICK

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Technical Bullet Series on Clay Brick Pavers

#7 – Cutting Clay Pavers

Abstract – This Technical Bullet details the best way to cut clay pavers with a diamond blade

Diamond Blade Basics

- Not all diamond blades are equal. There are different diamond blades made for cutting softer and harder material. Hard, dense materials like Pine Hall Brick's clay pavers need a softer bond matrix with a higher diamond concentration to cut effectively.
- A concrete blade with a hard bond matrix cutting Pine Hall Brick pavers will glaze over or polish after a few cuts and will quit cutting but still show segment life.
- For best performance, optimum Surface Feet per Minute (SFM) cut rate is 10,000 to 12,000. (see below) Harder materials like brick cut better at lower RPM's. Determine the best RPM speed through surface feet per minute calculations.
- Generally, the more horsepower (torque) applied to the blade shaft, the more efficient the cutting action. Remember, lower horsepower may require softer bonds to cut efficiently.
- Improper RPM's can cause blade wobble and may create dangerous cutting conditions
- Excessive pressure can dull the blade and cause it to cut slower or not at all.
- High speed saws should use a blade designed for high RPMs and not exceed 16,000 SFM.

Surface Feet per Minute and RPM

- The best cutting rate for Pine Hall Brick pavers is 10,000 to 12,000 SFM. Surface feet per minute is a factor of RPM and blade diameter. The formula to calculate SFM = $[\text{blade diameter} \times 3.14 \times \text{RPM}] / 12''$

Warning: The dust generated from dry sawing may contain silica and may be a potential health problem for the lungs. Pine Hall Brick recommends cutting with either a wet saw or a saw that has a built in dust collection devices like the saws made by IQ Power Tools.