

GUIDELINES FOR BASE THICKNESS RECOMMENDATIONS **(PIEDMONT/VALLEY & RIDGE PROJECTS ONLY)**

Soil Support Value	Min GAB for Interstates	Minimum for State Routes	Local
Less than 2*	12	12	10
2.0 – 2.5	12	12	10
2.5 – 3.0	12	10	8
3.0 – 3.5	12	10	8
3.5 – 4.0	12	8	6
4.0 – 4.5	12	8	6

Other factors affecting base thickness selection are:

1. Projected traffic volumes
2. Percent truck traffic
3. Type of roadway (major arterial with heavy industry nearby; low-volume rural road with little industry; county road vs. state route/US route, etc.)

The minimum GAB thicknesses shown may be reduced (but not less than 6” for local) for projects with low traffic volumes and/or low percent trucks, and for off-system county or city roads.

However, use the following:

1. Use minimum 8” GAB on state routes
2. Use minimum 12” GAB on Interstates and Interstate ramps

*Projects with soil support values less than 2.0 may need cement or lime stabilization. When soils are treated with lime, the SSV can be increased to a minimum of 3.5 and the base thickness correspondingly reduced. When soils are treated with cement, increase the SSV to 2.0. Only consider using the additional 4” GAB (for a total of 16”) on short sections of roadway with poor soils and/or high groundwater when lime or cement may not be justified for the entire project. For Pavement Design analysis purposes, the additional GAB required in those short sections is not considered a part of the Pavement structure.