



## CLIENT NOTE R2K-03

### DENSE GRADE ASPHALT: Recreation Areas

Dense graded asphalt or Asphaltic Concrete (AC) is a continuously graded mixture of coarse and fine aggregates, mineral filler and bitumen, produced hot in a mixing plant. It is delivered, laid and compacted while hot.

Roads2000 manufactures its own dense grade asphalts and is capable of producing and laying mixes for recreational areas with maximum stone sizes from 10mm to 5mm.

Generally recreational areas require soft dense grade asphalts in consideration of the low traffic loading and to extend the life of the wearcourse. Examples of recreation areas are tennis courts and basketball courts. The IPWEA/AAPA Technical Specification for Supply and Laying of Hot Asphalt Road Surfacing (Rev 2) provides advice on which dense grade designs should be used in particular circumstances.

Class 170 bitumen is recommended by IPWEA/AAPA however, Roads2000 uses Class 320 bitumen exclusively for all dense grade asphalts.

When laying dense grade asphalts, it is recommended that layer thicknesses are not less than 2.5x the stone size or greater than 5x the stone size eg 7AC should be no thinner than 18mm or thicker than 35mm. When laying multi-layer asphalts, the previous layer must be allowed to cool below 40°C. Compaction should be provided by a steel roller initially and back rolled with a rubber-tyred roller.

Special care is required with the quality of the underlying pavements. Contamination of the basecourse with salt or seed will result in damage to the new asphalt. It is also important that there is both adequate subsoil and surface drainage. If courts are being resurfaced, any existing cracks will reflect through to the new surface. It may be appropriate to consider re-working the old surface in these circumstances.

Roads2000 can provide advice to clients on the mix designs where required.

#### References

1. IPWEA/AAPA Technical Specification, Tender Form and Schedule for Supply and Laying of Hot Asphalt Road Surfacing (Rev 2, April 2002)
2. AAPA Information Booklet IB7: Driveways, Tennis Courts and Coloured Asphalt