

**Specification for open graded sub-base for use as storage below pervious pavements  
(also Type C filter material for filter drains and soakaway backfill in accordance with SHW Clause 505)  
Type 4/20**

**Material to BS EN 13242**

**Material to comprise crushed rock, concrete or blast furnace slag or similar approved. Crushed gravel is not permitted.**

| Properties                                                                                                                | Category to BS EN 13242 and BS 7533 Pt 13                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grading                                                                                                                   | Grading 4/20, Gc 85 – 15, GTc 20/17.5                                                                                                                                                          |
| Fines content                                                                                                             | $f_4$                                                                                                                                                                                          |
| Shape                                                                                                                     | $Fl_{20}$                                                                                                                                                                                      |
| Resistance to fragmentation                                                                                               | $LA_{30}$                                                                                                                                                                                      |
| Durability:<br>— Water absorption to BS EN 1097-6:2000, Clause 7<br>— For $WA > 2\%$ , magnesium sulfate soundness        | $WA_{242}$<br>$MS_{18}$                                                                                                                                                                        |
| Resistance to wear                                                                                                        | $M_{DE20}$                                                                                                                                                                                     |
| Acid-soluble sulfate content:<br>— aggregates other than air-cooled blast-furnace slag<br>— air-cooled blast-furnace slag | $AS_{0.2}$<br>$AS_{1.0}$                                                                                                                                                                       |
| Total sulfur:<br>— aggregates other than air-cooled blast-furnace slag<br>— air-cooled blast-furnace slag                 | $< / = 1\%$ by mass<br>$< / = 2\%$ by mass                                                                                                                                                     |
| Volume stability of blast-furnace and steel slags:<br>— air-cooled blast-furnace slag<br><br>— steel slag                 | Free from dicalcium silicate and iron disintegration in accordance<br>BS EN 13242:2002, <b>6.4.2.2</b><br>$V_5$                                                                                |
| Leaching of contaminants                                                                                                  | Blast furnace slag and other recycles materials should meet the requirements of the Environment Agency Waste Acceptance Criteria for inert waste when tested in accordance with BS EN 12457-3. |

Compaction should be in 150mm layers with 4 passes of a smooth wheeled roller max weight of 1000kg/m width WITHOUT VIBRATION.

Grading for 4/20 (RH column) From Interpave design guide

**Table 10: Aggregate gradings for sub-base materials to BS EN 12620**

| sieve size, mm | percentage passing       |                          |
|----------------|--------------------------|--------------------------|
|                | coarse aggregate<br>4/40 | coarse aggregate<br>4/20 |
| 80             | 100                      | –                        |
| 63             | 98-100                   | –                        |
| 40             | 90-99                    | 100                      |
| 31.5           | –                        | 98-100                   |
| 20             | 25-70                    | 90-99                    |
| 10             | –                        | 25-70                    |
| 4              | 0-15                     | 0-15                     |
| 2              | 0-5                      | 0-5                      |
| 1              | –                        | –                        |