Heidelberg Materials

Construction Aggregates

Technical data sheet

Health and safety

- As with all naturally occurring gravels and silica sands, small amounts of respirable quartz may be present.
- The aggregates such as 14mm Dust Limestone Chippings are unlikely to contain respirable silica but we recommend that the same precautions are taken.
- If inhaled in excessive quantities over extended periods, respirable quartz can constitute a long term health hazard.
- Do not breathe dust.
- Avoid eye contact.
- In case of contact with eyes, rinse immediately with plenty of water, avoiding rubbing action. Should irritation persist, obtain medical advice.

For cementitious mixes, follow health and safety advice detailed for cement. For further advice, please call the Hanson Cement Customer Services on **0330 123 2074**.

20mm Gravel

Technical data sheet

Pack size
Maxipack
Bulk

Description
20mm single-sized gravel aggregate conforming to the requirements of BS EN 12620: 2013.
Typical moisture content 3%.
Particle size 10 – 20mm.
Shell content ≤ 10.
Chloride content ≤ 0,01%.
Acid soluble sulphate ≤ 0.8.

Uses
In combination with cement, sharp sand and water in suitable mix designs to produce concretes for footings, foundations, setting posts, steps, etc. May also be used as a top dressing for paths and drive ways.

Product preparation and control of concrete
All the constituents should be thoroughly mixed prior to the addition of water. Sufficient water should then be added to give a suitable consistence for placing and compaction. On completion of compaction and finishing the concrete surface, a covering should be placed to prevent loss of moisture (curing) and surface damage. For best results and highest strength development the concrete should be protected for 7 days.

Mix design advice
The suggested mix design given below is a standard 1:2:4 mix and is suitable for most domestic applications. For further advice please consult BS 8500 Concrete art 1 Methods of specifying and guidance for the specifier table A 7 and BS 8500 Concrete Part 2 Specification for materials for concrete Table 12, which gives detailed advice.

Suggested mix designs
For coarse concrete mixes
1 part cement.
2 parts sharp sand.
4 parts 20mm Gravel.

Coverage
One Maxipack bag
As a coarse concrete mix sufficient for 0.35m2 @ 50mm depth.
As a top dressing – approx 0.4m2 @ 50mm depth.

One Bulk bag
In the above concrete mix 4.5m2 @ 100mm depth.
As a top dressing – 12m2 @ 50mm depth.

Cleaning
Clean down tools and equipment with water prior to the material setting.

10mm Gravel

Technical data sheet

Pack size
Maxipack
Bulk

Description
10mm single-sized gravel aggregate conforming to the requirements
of BS EN 12620: 2013.
Typical moisture content 3%.
Particle size 4 – 10mm.
Shell content ≤ 10.
Chloride content ≤ 0,01%.
Acid soluble sulphate ≤ 0.8.

Uses
With cement, sharp sand and water to produce fine concretes. This product is suitable for paths, patios, setting posts, steps and the top dressing for paths and driveways.

Suggested mix designs
For fine concrete mixes
1 part Ordinary Portland Cement.
2 parts sharp sand.
4 parts 10mm Gravel.

Coverage
One Maxipack bag
As a fine concrete mix sufficient for 0.35m2 @ 50mm depth.
As a top dressing – approx 0.4m2 @ 50mm depth.

One Bulk bag
As a fine concrete mix – 9m2 @ 50mm depth.
As a top dressing – 12m2 @ 50mm depth.

Cleaning
Clean down tools and equipment with water prior to the material setting.

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20mm Ballast

Technical data sheet

Pack size
Maxipack
Bulk

Description
20mm single-sized gravel aggregate conforming to the requirements of BS EN 12620: 2013.
Typical moisture content 3%.
Particle size 0 – 20mm.
Shell content ≤ 10.
Chloride content ≤ 0,01%.
Acid soluble sulphate ≤ 0.8.

Uses
As an 'all-in-one' aggregate with cement and water to produce coarse concretes. This product is suitable for footings, foundations, setting posts, steps, etc.

Suggested mix designs
For coarse concrete mixes
1 part Ordinary Portland Cement.
6 parts 20mm Ballast.

Coverage
One Maxipack bag
As a coarse concrete mix sufficient for 0.35m2 @ 50mm depth.

One Bulk bag
12.6m2 @ 50mm depth.

Cleaning
Clean down tools and equipment with water prior to the material setting.

14mm Dust Limestone Chippings

Technical data sheet

Pack size
Maxipack
Bulk

Description
14mm dust dolomitic limestone chipping conforming to the requirements of BS EN 12620: 2013.

Uses
Blinding layer, bulk and general fill.

Coverage
One Maxipack bag
0.014m³ if compacted as blinding layer.
0.017m³ if used as general fill.

One Bulk bag
0.5m³ if compacted.
0.6m³ if general fill.

Cleaning
Clean down tools and equipment with water prior to the material setting.

Grano Dust

Technical data sheet

Pack size
Maxipack
Bulk

Description
6mm dust granitic material conforming to the requirements of BS EN 12620: 2013.

Uses
When mixed with sand and cement produces a mortar ideally suited for floor screeds, monolithic and granolithic.

Do not use when air temperature below 2°C or when ground frozen.
Wet mortar should be protected from drying out too rapidly. Cover placed material with plastic sheet or wet hessian.
Allow concrete to dry sufficiently (time dependent on ambient conditions), prior to proceeding with further works.

Suggested mix designs
Heavy duty 12mm depth
Cement 50kg.
Dried sharp sand 88kg.
Grano Dust 88kg.

Heavy duty 20-34mm depth
Cement 50kg.
3mm sand 150kg.
Grano Dust 50kg.

Please note: the above are only suggested mix designs, the user should carry out trials and adapt designs to their own needs.

Cleaning
Clean down tools and equipment with water prior to the material setting.

MOT Type 1 Aggregate for road construction

Technical data sheet

Pack size
Bulk

Description
Crushed aggregate conforming to the requirements of BS EN 13242:2013 Aggregates for unbound and hydraulically bound materials for use in civil engineering and road construction.

Uses
Suitable for forming sub base or base layers to support other construction such as concrete drives or other paving materials. Will only perform if applied to suitable prepared sub grade and if compacted to form a dense layer. May also be combined with cement to produce a higher bearing capacity.

Pea Gravel

Technical data sheet

Pack size
Maxipack
Bulk

Description
10mm single-sized gravel aggregate conforming to the requirements of BS EN 12620: 2013.
Typical moisture content 3%.
Particle size 0 – 20mm.
Shell content ≤ 10.
Chloride content ≤ 0,01%.
Acid soluble sulphate ≤ 0.8.

Uses
With cement, sharp sand and water to produce fine concretes. This product is suitable for paths, patios, setting posts, steps and the top dressing for paths and driveways.

Suggested mix designs
For fine concrete mixes
1 part Ordinary Portland Cement.
2 parts Sharp Sand.
4 parts Pea Gravel.

Coverage
One Maxipack bag
As a fine concrete mix sufficient for 0.35m2 @ 50mm depth. As a top dressing – approx 0.4m2 @ 50mm depth.

One Bulk bag
As a fine concrete mix sufficient for 12.6m2 @ 50mm depth. As a top dressing – approx 14.4m2 @ 50mm depth.

Cleaning
Clean down tools and equipment with water prior to the material setting.