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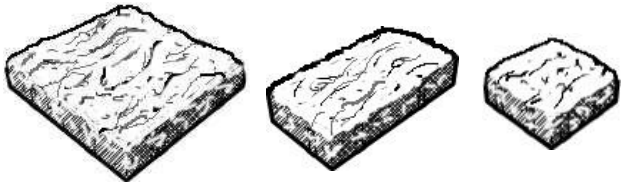
CANYON ROCK Series 80mm



PART 1: GENERAL

A. American Society of Testing Materials (ASTM)References

B.

1. C936, Standard Specification for Solid Concrete Interlock Paving Units
   a. Clarification, Section 1.2 – Hydro-Flo pavers have the desired special feature of being permeable. Therefore, regarding Section 5.4, by design, the absorption rate is greater for Hydro-Flo pavers than the 5% desired for non-pervious pavers. Similarly, for Section 5.3 the compressive strength for Hydro-Flo pavers is less than the 8,000-psi required for non-pervious pavers as the main property of pervious concrete, permeability, is inversely proportional to strength.
2. C140, Standard Test Methods of Sampling and Testing Concrete Masonry Units
3. C136, Method for Sieve Analysis for Fine and Coarse Aggregate
4. C33, Specification for Concrete Aggregates
5. D2940, Standard Specification for Graded Aggregate Material for Bases

Quality Assurance

A. Engage an installer who has successfully completed installations similar in type and size to this project. Installer shall provide certification of experience.

B. As applicable by state/provincial and local laws, contractor shall hold a current contractor's and business license in the state/ province and locality where work is performed.

Delivery, Storage and Handling

A. Deliver interlocking pavers to the site in plastic wrapped cubes capable of transfer by fork lift. Unload pavers at job site in such a manner that no damage occurs to the product.

B. Cover sand and topsoil with waterproof covering to prevent exposure to rainfall or removal by wind. Secure the covering in place.

Environmental Conditions

A. Do not install sand or pavers during heavy rain or snowfall.

B. Do not install frozen sand or topsoil.

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PART 2: PRODUCTS

Dimensions, Quantities and Weight

A 12” x 12” x 3 1/8”	12” x 6” x 3 1/8”	6” x 6” x 3 1/8”
B. Stones per SF: 1	Stones per SF: 2	Stones per SF: 4
C. Stones per pallet: 72	Stones per pallet: 144	Stones per pallet: 288
D. Coverage: 72 sf per pallet	Coverage: 72 sf per pallet	Coverage: 72 sf per pallet
E. Weight: 31 lb/sf, 2,232 lb/pallet	Weight: 32 lb/sf, 2,232 lb/pallet	Weight: 30 lb/sf, 2,232 lb/pallet

Crushed Stone Filler, Bedding, Base and Subbase

A. Crushed stone with 90% fractured faces, LA Abrasion < 40 per ASTM C131, minimum CBR of 80% per ASTM D1883.
B. Do not use rounded river gravel.
C. All stone materials shall be washed with less than 1% passing the No. 200 sieve.
D. Joint/opening filler, bedding, base and sub-base: conforming to ASTM D448 gradation as shown in Tables 1, 2, 3 and 4 below:
   1. Depths of each layer per designer, landscape architect and/or soils engineer.

Table 1: ASTM C33 Fine Aggregate Joint Filler – Grading Requirements:

Sieve Size	Percent Passing
3/8 inch (9.5 mm)	100
No. 4 (4.75 mm)	95-100
No. 8 (2.36 mm)	80-100
No. 16 (1.18 mm)	50-85
No. 30 (600 µm)	25-60
No. 50 (300 µm)	5-30
No. 100 (150 µm)	0-10

Table 2: No. 8 Bedding Aggregate – Grading Requirements:

Sieve Size	Percent Passing
1/2 inch (12.5 mm)	100
3/8 inch (9.5 mm)	85 to 100
No. 4 (4.75 mm)	10 to 30
No. 8 (2.36 mm)	0 to 10
No. 16 (1.18 mm)	0 to 5

Table 3: No. 57 Base Aggregate – Grading Requirements:

Sieve Size	Percent Passing
1 1/2 inch (37.5 mm)	100
1 inch (25 mm)	95 to 100
1/2 inch (12.5 mm)	25 to 60
No. 4 (4.75 mm)	0 to 10
No. 8 (2.36 mm)	0 to 5

Table 4: No. 2 Subbase Aggregate – Grading Requirements:

Sieve Size	Percent Passing
3 inch (75 mm)	100
2 1/2 inch (63 mm)	90 to 100
2 inch (50 mm)	35 to 70
1 1/2 inch (37.5 mm)	0 to 15
3/4 inch (19 mm)	0 to 5

PART 3: EXECUTION

Note: The specifier should be aware that the top surface of the pavers after compaction may be 1/8 to 1/4 in. (3 to 7 mm) above the final elevations after compaction. This difference in initial and final elevations is to compensate for possible minor settling.

Examination

Note: For vehicular areas, specify compaction of the soil subgrade to a minimum of 95% standard Proctor density for open-graded aggregate bases. Density should be monitored in the field with a nuclear density gauge. Compaction of open-graded bases should be with at least five passes of roller compactor without vibration. Stabilization of the soil and/or base material may be necessary with weak or saturated soils.

A. Verify that base is dry, uniform, even, free of any sediment (if open-graded), and ready to support sand, pavers and imposed loads.
B. Verify gradients and elevations of base are correct.
C. Verify location, type, installation and elevations of edge restraints around the perimeter area to be paved.
D. Beginning of installation means acceptance of base and edge restraints.

Installation

A. Spread the leveling coarse aggregate evenly over the compacted, open-graded base course and screed uniformly to 1 – 1 ½ in. (25 - 40 mm) thickness. The screeded aggregate should not be disturbed. Place sufficient aggregate to stay ahead of the laid pavers.
B. Ensure that pavers are free from foreign materials before installation.
C. Lay the pavers in the pattern(s) as shown on the drawings. Maintain straight pattern lines.
D. Joints between the pavers shall be between 1/16 in. and 1/8 in. (2 to 4 mm) wide.
E. Fill gaps at the edges of the paved area with cut pavers or edge units.
F. Cut pavers to be placed along the edge with a double-bladed splitter or masonry saw.
G. Compact and seat the pavers into the screeded aggregate using a low amplitude, 75-90 Hz plate compactor capable of at least 5,000 lbs. (22 kN) centrifugal compaction force. Note: A rubber or neoprene pad between the compactor and grids is necessary to prevent cracking or chipping on textured surfaces.
H. Vibrate and compact the pavers again, sweeping a small fraction of ASTM C33 fine aggregate or equivalent into the joints and openings until it is within ½ in. (13 mm) from the top surface. This will require at least two or three passes with the compactor. Do not compact within 3-ft (1 m) of the unrestrained edges of the paving units.