



Interlocking Concrete Pavers Bituminous-Sand Set Construction Checklist

PRE-CONSTRUCTION MEETING

Meeting should be conducted with the owner or representative, engineer, general contractor and paver installer.

- Verify site layout conforms to Site Plan.
- Determine when pavement is scheduled in the construction sequence.
- Designate material storage area(s). Identify access routes and delivery truck unloading area(s).
- Verify that the subgrade soil meets the project specifications including compaction requirements.
- Review Physical Mock Up (when required) and verify approval.
- Verify laying pattern for pavers, including borders, shapes and colors, match approved mock-up.
- Determine method for tagging and numbering concrete unit bundles delivered to the site (particularly important for large projects).
- Review Submittals and verify approval.

CONFIRM RESPONSIBILITIES

- | | |
|---|-----------|
| <input type="checkbox"/> Subgrade inspection and approval. | By: _____ |
| <input type="checkbox"/> Excavation and disposal of site soils. | By: _____ |
| <input type="checkbox"/> Installation of curbs and/or edge restraints. | By: _____ |
| <input type="checkbox"/> Installation of geotextiles & drainage components. | By: _____ |
| <input type="checkbox"/> Base approval & concrete slab weep holes. | By: _____ |
| <input type="checkbox"/> Tack coat application. | By: _____ |
| <input type="checkbox"/> Installation of Bituminous Sand Mix. | By: _____ |
| <input type="checkbox"/> Neoprene Adhesive. | By: _____ |
| <input type="checkbox"/> Installation of pavers. | By: _____ |

PRODUCT DELIVERY

Verify proper materials have been received and are in good condition.

Pavers: Type:_____ Finish:_____

Size:_____ Thickness:_____

Color:_____ Supplier:_____

Jointing Material (loose): Gradation Results Crushed Stone Confirmed

Jointing Material (bagged): Brand:_____ Color:_____

Geotextile (if required): Brand/Type:_____ Roll Size:_____

Note: Use geotextiles and/or barriers to prevent loose aggregates (e.g. bedding sand) from becoming contaminated. Cover aggregate piles with waterproof tarps.

MOBILIZATION

- Mark construction area with paint and/or stakes.
- Verify utilities have been located and marked by local services.
- Insure linear sediment barriers (if used) are properly installed, free of accumulated liter, and built up sediment.
- Rope off area to prevent unauthorized access.

EXCAVATION - if Applicable

- Excavate to the grades and elevations shown on the drawings.
- Inspect soil subgrade and remove any roots, rocks or other debris.
- Confirm no groundwater seepage and/or standing water is present at subgrade.
- Proof roll soil subgrade to determine presence of soft spots or localized pockets of objectionable materials.
- Conduct soil compaction measurements per specifications. Subgrade compaction should be at least 98% of Standard Proctor density.
- Bottom of excavation to be within +/- 0.1 feet of the specified grades.
- Confirm design subgrade slope requirements are met.

INSTALLATION GEOTEXTILE - if Applicable

- Roll out geotextile as required. Geotextile to be applied to the bottom and sides of the excavation with overlapping joints a minimum of 24 inches.
- Overlap to follow down slope.
- Do not allow wrinkles; pull taught and secure in place (use stakes or sandbags).
- Inspect geotextile to verify no tears or holes.

INSTALLATION BASE COURSE - if Applicable

- Install any perforated drains as shown on the drawings. Surround with minimum 3 in. of No 57 stone or similar. Wrap stone with geotextile.
- Spread (not dumped) with a front-end loader to avoid aggregate segregation.
- Place and compact subbase aggregate in 4" - 6" uniform layers if concrete base is not being used.
- Place and compact dense graded aggregate base course in 4"-6" uniform layers if concrete base is not being used.
- Final surface tolerance shall not deviate more than 3/8 inch from the bottom edge of a 10-foot straight edge laid in any direction.
- Final surface elevation to be within +/- 1/4 inch of the specified grades.
- Concrete base slab, if used, per designer's specifications with 2" weep holes with drain fill and elevation to be thickness of paver plus 3/4" for bituminous setting bed below final finished grade.

Note: Attention will be paid to providing proper compaction near curbs, grade beams, concrete collars around utility structures, lights standards, tree wells, building edges and other protrusions as applicable to the project. In areas not accessible to large compaction equipment, compact to specified density with mechanical tampers (jumping jacks).

INSTALLATION EDGE RESTRAINT

Adequate edge restraint shall be provided along the perimeter of all paving as specified.

- Confirm the face of the edge restraint, where it abuts pavers, is vertical.

- Verify concrete edge restraints are constructed to dimensions specified and are supported on a compacted subbase not less than 6 inch thick.
- Verify concrete used for the construction of edge restraints meets air-entrainment and compressive strength requirements as specified. All poured concrete shall be in accordance with ASTM C-94 requirements.

INSTALLATION of Bituminous - Sand mix Setting Bed

- Verify the concrete surface is clean and free of debris. Apply an emulsified asphalt tack coat with a squeegee, mop or short nap roller for best results to coat the surface of concrete for vehicular areas.
- Place steel screed bars to receive a nominal 3/4 inch thickness of bedding material.
- Bedding materials should not be used to compensate for an uneven base.
- Vehicular areas with pavers will require compaction to close the surface of the bituminous setting bed. Pedestrian areas with pavers or slabs will not require initial compaction of setting bed.
- Verify the hot bitumen-sand bedding layer is placed, screeded and compacted while remaining above 250° F (120° C).
- Apply thin coat of neoprene adhesive to compacted setting bed areas with a squeegee and allow time to tack (typically 1 to 2 hours).

Note: DO NOT disturb placed and screeded bituminous- sand mix. Refer to ICPI Tech Spec #20, *Construction of Bituminous-Sand Set Interlocking Concrete Pavement*, for additional information.

PAVER INSTALLATION

- Inspect pavers for chipped, damaged, or discoloration prior to installation. NOTE: mechanical installation may not comply with discoloration aspect for individual layers and should be addressed with Mock up review and approval.
- Confirm that the pavers are installed in the pattern(s) as shown on the drawings.
- Verify proper color blending, by ensuring installer draws from a minimum of 3 cubes for manual installation and 6 cubes for mechanical installation.
- Joints between the individual pavers, and between pavers and the edge restraints, buildings, collars, or other protrusions/edging, on average shall be between 1/16 in. and 3/16 in. wide.

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- Fill gaps greater than 3/16 in. wide with cut pavers or edge units. Do not install cut pavers smaller than one-third of a whole paver along edges subject to vehicular traffic – trim two pavers to fit.
- Confirm all pavers are cut using a masonry saw.

JOINTING SAND INSTALLATION

- Confirm installer sweeps dry joint sand into paver openings and vibrate until they are full. Note: this will require at least two or three passes with the compactor.
- Confirm installer does not compact within 6 ft. of the unrestrained edges of the paving units.
- Confirm installer sweeps off excess aggregates when the job is complete.

FINAL TOLERANCES

- Verify that final surface elevations do not deviate by more than 3/8 in. under a 10 ft. long straightedge.
- Verify that the surface elevation of the pavers are 1/8 to 1/4 in. above adjacent drainage inlets, concrete collars or channels in pedestrian areas. Note: Vehicular areas may be 3/8" above similar penetrations.
- Verify lippage is not greater than 1/8 in. between adjacent pavers.
- Verify paver bond lines for paver courses are +/- 1/2 in. over a 50 foot string line.
- Verify final surface slopes are a minimum of 1.5% (for roads, minimal longitudinal slopes should be 1% with a minimum cross slope of 2%).