

SECTION 32 12 43 — POROUS FLEXIBLE PAVING

PART 1 — GENERAL

1.01 SUMMARY

A. Section Includes:

1. Porous flexible paving system consisting of recycled rubber aggregate bound with polyurethane binder installed over a prepared aggregate base.
2. Pedestrian paths, trails, plazas, tree surrounds, golf cart paths, pool decks, playground safety surface, and light-duty vehicular areas where indicated.

1.02 REFERENCES

Comply with latest editions of:

- ASTM C1701 — Infiltration Rate
- ASTM D2859 — Flammability
- ASTM C39 — Compressive Strength
- ASTM D2047 — Slip Resistance
- ASTM F1292 — Shock Attenuation
- ADA Accessibility Guidelines (ADAAG)

1.03 SUBMITTALS

- A. Product Data: Manufacturer specifications, installation instructions, and maintenance procedures.
- B. Shop Drawings: Layout, thickness, edge restraints, drainage details.
- C. Samples: Minimum 4 × 4-inch sample showing color and texture.
- D. Test Reports: Independent laboratory verification of permeability and physical properties.
- E. Qualifications: Installer trained/supervised by manufacturer on initial project.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum 5 years' experience producing porous flexible paving systems.

B. Installer Qualifications: Approved through remote webinar and onsite installation training/supervision by manufacturer on initial project.

1.05 DELIVERY, STORAGE, AND HANDLING

Deliver materials in original unopened containers. Protect from moisture, freezing, and contamination.

1.06 PROJECT CONDITIONS

Do not install when:

- Ambient temperature below 40°F (4°C)
- Surface is frozen
- Rain is forecast within curing period

PART 2 — PRODUCTS

2.01 MANUFACTURERS

Basis of Design:

perkEpave® Porous Flexible Paving System

perkEpave.com (215) 316-6383

Acceptable manufacturers:

- perkEpave®
- Approved equal meeting performance criteria

2.02 MATERIALS

A. Porous Flexible Paving Surface:

1. Composition:

- Recycled rubber aggregate
- Moisture-cured polyurethane binder
- Washed and kiln dried stone aggregate

2. Thickness:

- Pedestrian: 1.5–2 inches
- Light vehicular: 2 inches
- As indicated on drawings

3. Permeability:

Minimum 800 inches/hour infiltration rate per ASTM C1701.

4. Slip Resistance:

Minimum coefficient of friction 0.7 dry.

5. Color:

As selected by Architect from manufacturer's standard range.

2.03 BASE MATERIAL

A. Aggregate Base:

- ASTM Clean No. 57
- Minimum 3-4 inches thickness, depending on loading conditions and stormwater requirements

B. Optional Stabilization Layer:

- Geotextile separator fabric where subgrade conditions require.

2.04 EDGE RESTRAINTS

Provide temporary forms or permanent aluminum edge restraints when required.

PART 3 — EXECUTION

3.01 EXAMINATION

Verify subgrade preparation and drainage conditions prior to installation. Do not proceed until unsatisfactory conditions are corrected.

3.02 PREPARATION

A. Subgrade:

- Compact to 95% Modified Proctor (ASTM D1557)
- Grade to allow positive drainage
- Remove unsuitable soils

B. Base Installation:

- Install aggregate base in lifts
- Compact and level
- Maintain permeability

3.03 INSTALLATION

A. Mix rubber aggregate and polyurethane binder per manufacturer ratios.

B. Place material uniformly to specified thickness.

C. Trowel finish to smooth, even surface with no voids.

3.04 CURING

Allow minimum 24–48 hours cure time prior to pedestrian traffic.

Allow 72 hours before vehicular loading.

3.05 FIELD QUALITY CONTROL

A. Verify surface thickness

B. Repair defects immediately.

3.06 PROTECTION

Protect installed surface from:

- Construction traffic
- Contamination
- Standing water during curing

3.07 CLEANING

Remove debris and leave surface clean upon completion.