

Fly Ash Paver Tech Data

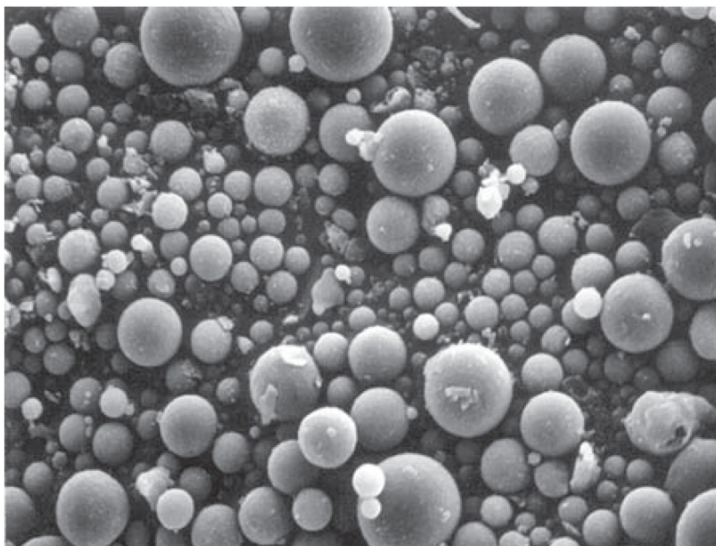
FLY ASH PAVER: SUSTAINABLE PAVING

CalStar® fly ash pavers add great environmental value to projects. Paver's durability gives it long service life. When laid in open configurations with permeable bases, pavers can reduce runoff, stormwater pollution, and erosion.

Light colors can reduce the heat island effect, helping keep cities and developments cooler.

CalStar's fly ash paver is a revolution in paving. Instead of mining virgin clay and firing it, CalStar reclaims fly ash, a byproduct of burning coal, and converts it to a strong, beautiful building material. By using fly ash, CalStar:

- saves production energy
- preserves natural materials
- reduces pollution and landfill space
- reduces carbon emissions
- provides a market for recycling



1. PRODUCT NAME

CalStar® Fly Ash Paver

2. MANUFACTURER

CalStar Products, Inc.

Headquarters

CalStar Products, Inc.

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Newark, CA 94560

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Technical Center:

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Factory:

2825 4 Mile Road

Caledonia, WI 53404

3. PRODUCT DESCRIPTION



Basic Use: CalStar fly ash pavers are used for walkways, plazas, and driveways, on rigid, flexible, or pervious bases. Whether warmly traditional or crisply modern, pavers provide a beautiful, durable surface.

Composition and Materials: Unlike clay pavers, CalStar's paver is not fired. Its main ingredient is ASTM C 618 Class C fly ash, a self-cementing byproduct of coal combustion. Fly ash, aggregate, mineral oxide pigments, and proprietary ingredients are mixed with water, vibro-compacted, and cured into a stable cementitious solid.

<p>Grades: ASTM C902 Class SX, Severe Exposure, suitable for walkways and driveways in severe climates and freeze-thaw conditions.</p>
<p>Types: ASTM C902 Type II, Intermediate Abrasion.</p>
<p>Sizes: inches (mm) 4 w, 2 3/8 h, 8 l (98.5 w, 60 h, 198.5 l). Integral spacers for 1/16 (1.5) gaps.</p>
<p>Colors: Standard and custom earth-tone colors are available, alone and in blends. Precise dosing of mineral oxide pigments provides consistent color, with no need to specify lot numbers or to retain significant quantities of attic stock.</p>
<p>Textures: Smooth texture is standard.</p>
<p>Limitations: Do not use as heavy-duty vehicular paving or where traffic will exceed 251 daily equivalent single loads (ESAL) or 30 miles per hour. Do not use for chemical-resistant brick flooring.</p>
<p>4. TECHNICAL DATA</p>
<p>Applicable Standards: ASTM C 902 — Pedestrian and Light Traffic Paving Brick</p>
<ul style="list-style-type: none"> • Efflorescence: CalStar Fly Ash Paver meets or exceeds the rating “Not Effloresced” when tested according to ASTM C67.
<ul style="list-style-type: none"> • Strength: Meets or exceeds performance of ASTM C 902 for SX Molded Clay Brick
<ul style="list-style-type: none"> • Dimensional Stability: Meets or exceeds performance of ASTM C 902 for SX Clay Brick
<ul style="list-style-type: none"> • Initial Rate of Absorption: 1–14 g/min/30 in²

Sustainability:
<ul style="list-style-type: none"> • Recycled Material: 40% fly ash by weight. Fly ash, a byproduct of coal combustion, is considered post-industrial (pre-consumer) waste for LEED credits.
<ul style="list-style-type: none"> • Embodied Energy: estimated: 1.01 MJ (1000 BTUs) per paver.
<ul style="list-style-type: none"> • CO₂ Footprint: estimated production footprint of 0.045 kg (0.1 lb) of carbon dioxide per paver.
<ul style="list-style-type: none"> • Solar Reflectance: Varies by color. Some colors with SRI of 29 or greater are expected; contact CalStar for more information.
<p>5. INSTALLATION: Comply with ASTM C 902 applications PS, PX, or PA, as applicable to the project design.</p> <p>Comply with BIA Technical Note 20 for progress cleanings and final cleaning.</p>
<p>6. AVAILABILITY AND COST: Availability: CalStar fly ash pavers are manufactured in Caledonia, WI and available throughout the Midwest US and southern Ontario.</p> <p>Cost: Cost is competitive with clay pavers of similar quality.</p> <p>Shipping Cost: CalStar is 75 miles from downtown Chicago, several hundred miles closer than the next nearest commercial brick plant, saving shipping costs.</p>
<p>7. WARRANTY</p> <p>TBD</p>
<p>8. MAINTENANCE</p> <p>Regular Maintenance: CalStar fly ash pavers should be maintained according to BIA Technical Note 14.</p>

Coatings: Coatings are unnecessary for most designs. CalStar fly ash pavers' low absorption helps prevent staining.

9. TECHNICAL SERVICES

www.CalStarProducts.com

10. OTHER RESOURCES

Guide specification 32 14 16

www.GreenFormat.com

Additional product information available upon request.



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