

Alternative Infills for Synthetic Turf - Pros and Cons				
Type of Alternative Infill	Material	Brand/Trade Names	Pros	Cons
Crumb Rubber	Styrene butadien Rubber (SBR) Recycled tire rubber shredded	None SBR rubber Ambient or Cryogenic	Low Cost / Recycled Material Highly Analyzed and Tested for safety, environmental and health concerns when as turf infill. Good Drainage Does not float Low Maintenance, High UV Stability - Maintains Resiliency Manufacturers Warranties Warm fields in freezing climates Readily available	Poor Reputation / Perception as 'trash' Perception as Hazardous to Human Health 'Heat' of play, Hot Fields / Concern in Warm Climates Static Cling - gets in Uniforms and Equipment
Silica Sand	Rounded Silica Sand	Sand None	Low Cost Highly Analyzed as Infill Low Maintenance Good Drainage Common Mineral Manufacturers Warranties Adds Weight/Stability to Infill Systems	Relative 'hardness' Abrasive Cost (Requires Resilient Pad if used alone)
Organic	Cork or Cocunut Husk or Rice Hulls or a mix of above	ProGeo - Geoturf Purefill - Field Turf Geofill - Shaw Sports Natrafill	Natural Material / Renewable Perception as Natural Material Reported to reduce Heat Concerns as Infill Natural Color & appearance Good Resiliency Reported Common Use in Europe	High Cost - High materials Costs Cost - Resilient Pad Recommended Cost - must be kept moist - Requires Irrigation System Cost - Higher Maintenance costs/Shorter Life Cycle* Potential to Plug/affect drainage Freezes-Hard fields in freezing climates Potential for weed and mold growth Limited availability Floats - Should not be used in Flood Prone Areas
Coated Crumb Rubber	SBR (Styrene butadien Rubber) Recycled tires shredded and coated with acrylic or EPDM	Polytan RPU - Polytan Cushionfall Sport Coolfill - SprintTurf	Low Maintenance Good Drainage High UV Stability - Maintains Resiliency Coating reported to encapsulate SBR rubber outgassing & improve heat concerns Manufacturers Warranties Does not Float Variety of Colors - Reported to reduce heat concerns Does not require Resilient pad or Irrigation	High Cost - High materials Costs Same chemical make-up & potentials as SBR Rubber Relatively little analysis as Turf Infill Limited availability
EPDM (Ethylen Propylene Diene Monomer) Rubber	Virgin rubber produced for infill of athletic fields only	EPDM Melos EPDM ST - APT Melos Bionic EPDM - APT Gezofill - Gezolan corp.	Low Maintenance Good Drainage High UV Stability - Maintains Resiliency Manufacturers Warranties Does not Float Variety of Colors - Reported to reduce heat concerns Does not require Resilient pad or Irrigation	High Cost - High materials Costs Very Similar chemical make-up & potentials as SBR Rubber Relatively little analysis as Turf Infill Generic Material - Must use Proven - Proprietary formulations for quality Limited availability in quantities needed for fields
TPE (Thermoplastic Elastomer)	Extruded plastic pellets	EcoGreen - Field Turf Eco Max - Field Turf BionPro - Polytan FutrFill - Target indust.	Low Maintenance Good Drainage High UV Stability Manufacturers Warranties Variety of Colors - Reported to reduce heat concerns Does not require Irrigation Common plastic used widely in medial, food and toy manufacture Some Older U.S. Installations	High Cost - High materials Costs Cost - Use of Resilient Pad Recommended Relative hardness - Needs Resilient Pad Generic Material - Must use Proven - Proprietary formulations for quality Limited availability in quantities needed for fields Limited analysis for use as Infill
Coated Sand	Polymer Coated Silica Sand	Flexsand Envirofill	Low Maintenance Very Good Drainage Manufacturers Warranties Variety of Colors - Reported to reduce heat concerns Does not require Irrigation Does not float Can add weight/stability to infill systems	High Cost - High materials Costs Cost - Use of Resilient Pad Recommended Relative hardness - Needs Resilient Pad Generic Material - Must use Proven - Proprietary formulations for quality Limited availability in quantities needed for fields Limited analysis for use as infill Unproven - Limited use as infill
Nike Grind	Nike's Environmentally Preferred Rubber (ground sneakers) (Meets or exceeds restricted substance standards set for wearable consumer goods)	Nike Grind Eco-grind - Field Turf	Low Maintenance Very Good Drainage Good resiliency & Life cycle Recycled Material Does not require Irrigation or Resilient Pad Has been used for years with SBR or as stand alone infill additive	High Cost - High materials Costs Very Limited Availability No color choices - Poor aesthetics - can look 'trashy' Very Similar chemical make-up & potentials as SBR Rubber Static Charge - sticks to equipment and clothing
<b>Notes:</b>				
This Summary is assembled from available information some of which was obtained from materials vendors literature This summary is intended as a general reference, is not specific in nature, and is not intended as a stand alone document.				