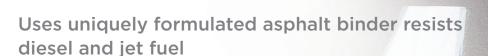


AIRPORT GRADE FUEL-RESISTANT HIGH SHEAR ASPHALT MIX



Uses high-quality aggregate with a gradation tailored to providing superior rut and fatigue resistance

Elevated AC content provides durability and extended fatigue life under repetitive heavy traffic

PRODUCT DESCRIPTION

STELLARFLEX FR® is a specialty asphalt mixture uniquely formulated to be resistant to fuel (diesel, jet fuel, conventional, etc.) and can be used for a wide range of applications, including:

- airport pavements (runway, taxiway, de-icing stations)
- heavily loaded pavements with high volumes & slow truck traffic
- fuelling stations and fuel storage tank areas
- truck stops

GENERAL PRODUCT FEATURES

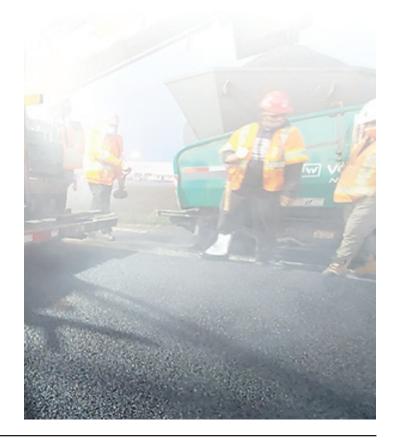
- Uses customer-provided aggregates and is designed upon request to meet or exceed the requirements outlined in the specification
- Uses uniquely formulated asphalt binder to resist fuel-based degradation of mixes and to enhance resistance to extremely lowemperature cracking
- Uses high quality aggregates with a tailored gradation to provide superior rut and fatigue resistance
- An elevated AC content ensures durability and extends fatigue life under repetitive heavy traffic

DESIGN GUIDELINES

STELLARFLEX FR® specifications will vary depending on jurisdiction and local practices. *MCA* Engineering Services will design the specialty mix to meet or exceed all FAA specifications (i.e P-404, formerly known as P-601) and performance criteria required, including:

- custom selection and formulation of the STELLARFLEX FR PMA®
- aggregate selection and blending
- designing the mix to meet or exceed all volumetric requirements
- performance testing
- application recommendations

PROPERTY	TYPICAL RESULTS		P-404 ICATION Max.
Gradation and PGAC			
9.5 mm, % passing	88	79	99
4.75 mm, % passing	66	58	78
2.36 mm, % passing	46	39	59
0.075 mm, % passing	6	3	6
AC Content, %	6.0	5	8
Minimum PG Spread, °C	110	110	-
Volumetric and Performance Requirements			
Marshall Flow, 0.25 mm	19.8	-	-
Marshall Stability, N	15000	9567	-
Air Voids, %	2.50	2.30	2.70
24hr Mass Loss After Jet Fuel Immersion, %	0.80	-	1.15
Retained Stability After 24hr Jet Fuel Immersion	75	-	-





CERTIFICATION OF QUALITY

McAsphalt Industries Limited is accredited to the quality standard ISO 9001, the environmental standard ISO 14001 and the health and safety standard ISO 45001.

McAsphalt's Quality Control Plan is available to you, providing guidance on the proper production, lay-down and compaction techniques required to correctly apply **STELLARFLEX FR®**. In addition, our team of experts is always available to offer unsurpassed technical support during the construction phase.

The quality control plan will ensure that:

- STELLARFLEX FR® is produced at the recommended temperature
- STELLARFLEX FR PMA® is formulated to meet or exceed requirements and is shipped at the correct temperature
- appropriate lay-down equipment is utilized for projects
- proper mix compaction best practices are utilized to achieve in-situ target density



PRODUCT SUPPORT

With the MCA Advantage, you get a partner and advisor who will consult with you about designs, specifications, technical services, processes, and material selection. By developing innovative, custom-designed products that offer additional benefits such as peak performance in unique conditions, improved field performance, and greater environmental and health benefits, the MCA Advantage provides significant long-term cost savings, resulting in lower total cost of ownership.



