



IntegraBond™ Flex

DURABLE CEMENT FOR HIGH-STRESS APPLICATIONS

APPLICATIONS

- Critical primary cementing operations
- Vertical, inclined and horizontal wellbores
- Production and injection wells
- Fields with a history of sustained annular pressure
- Wells exposed to high-pressure fracturing operations
- Multilateral wellbore junctions

FEATURES & BENEFITS

- Improved long-term well integrity
- Enhanced tensile and flexural strength
- Improved elasticity
- Improved durability during pressure and thermal cycles
- Good mechanical properties at low densities
- Durability for multilateral junctions where cement is exposed to high mechanical stress
- Mixed and pumped with conventional cementing equipment
- Compatible with virtually all API and ASTM cements, as well as American Cementing Services cement additives

OVERVIEW

Cement failure can be caused by exposure to forces that exceed its mechanical strength; these forces can be induced from excessive wellbore pressure, temperature cycles or formation depletion. These changes occur during completion, production or remediation activities, including hydraulic fracturing and water, gas or steam injection. Failure of this seal may result in production of undesirable water, gas or gas to surface, usually manifested by sustained casing pressure (SCP).

IntegraBond Flex cement systems use a special selection of mechanical property enhancers to improve the flexural and tensile strength, elastic properties and fracture toughness of the set cement. These cements are designed using proprietary software and tested with a variety of specialty laboratory protocols to ensure fit-for-purpose mechanical properties.

TYPICAL PROPERTIES

TYPICAL DENSITY RANGE	9 to 20 ppg
TYPICAL TEMPERATURE RANGE	70°F TO 450°F