Chartek® 1709 reduces the total cost of ownership while maintaining fire performance for the life of the facility.

- Provides corrosion protection and passive fire protection in a single system
- Provides real lifecycle cost saving by reducing on-going maintenance
- Tough and durable coating resistant to impact, vibration and mechanical damage
- Advanced Chartek® technology, qualified by Underwriters Laboratories (UL) ANSI/UL 1709
- 100% volume solids
- Greatly reduced thickness and lower installed weight compared to other passive fire protection systems
- Increased productivity through elimination of welded pin application and optimized mesh requirement
Chartek 1709 provides long term corrosion and fire protection in a single system

Chartek® products have over 40 years track record in providing fire protection to oil and gas installations.

Chartek® 1709 is ideal for the protection of onshore structural steel assets from the effects of hydrocarbon pool fires.

Long term corrosion protection
Chartek® 1709 has extremely low water absorption and as a result significantly reduces the corrosion rate of steel under fire proofing that can compromise steel load bearing capacity.

Chartek® 1709 increases the time before any major maintenance is needed. This reduces inspection costs and the risk of downtime due to M&R delay.

Fully certified and tested
Chartek® 1709 also has the following approvals:
- Underwriters Laboratories (UL) ANSI/UL 1709
- Factory Mutual (FM)
- Blast resistant up to 4 bar overpressure (0.4Mpa)
- NORSOK M501 System 5

Ideal for new construction
Chartek® 1709 is perfectly suited for modular and stick new construction projects. Applied off-site, Chartek® 1709 removes fireproofing from the project’s critical path. Chartek® 1709 is easy to apply: it does not require pins and metal mesh and cures quickly into a hard coating; when required HK-1 flexible mesh can be easily applied. This means that not only can it be moved within 16 hours but also means it is damage resistant during transportation and construction.

Reduced installed cost
Chartek® 1709’s low applied thickness and simpler mesh requirement reduces the size of block outs required for stick steel construction. This results in reduced onsite application time which in turn minimizes costs. Chartek® 1709’s low applied weight, compared to steel coated by cementitious materials, results in lower transportation costs as fewer truck journeys are required to move the steel to site.

Chartek® 1709 is quick and easy to install by means of airless spray, trowel or casting techniques greatly enhancing project efficiency.

Cryogenic spill protection
A duplex system of Chartek® 1709 with Intertherm® 7050 provides both fire protection and insulation that prevents brittle fracture of steel in the event of a cryogenic liquid (e.g. LNG) spillage.

The duplex system has been approved by an independent third party to provide fire protection after immersion in cryogenic liquid. The system offers resistance to cryogenic liquid spills, splashes and fog without significant detriment to fire protection.

World leading service
Chartek® 1709 is manufactured globally in our wholly owned factories in Europe, America and Asia. International® can supply sales and technical support in all regions of the world.

Underwriters Laboratories Inc. Fire Resistance Ratings - ANSI/UL 1709 Design No. XR625

<table>
<thead>
<tr>
<th>RATING (HOURS)</th>
<th>CHARTEK® 1709 WITH MESH</th>
<th>CHARTEK® 1709 THICKNESS</th>
<th>MESH REINFORCEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>½</td>
<td>-</td>
<td>95 mils (2.40 mm)</td>
<td>No mesh reinforcement required</td>
</tr>
<tr>
<td>¾</td>
<td>-</td>
<td>149 mils (3.76 mm)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>-</td>
<td>202 mils (5.12 mm)</td>
<td></td>
</tr>
<tr>
<td>1½</td>
<td>310 mils (7.85 mm)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>417 mils (10.57 mm)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2½</td>
<td>524 mils (13.30 mm)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>599 mils (15.21 mm)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3½</td>
<td>674 mils (17.10 mm)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>748 mils (19.99 mm)</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

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