CASE STUDY  
↘security doors

Steel specialists Abraservice, one of Europe’s leaders in the distribution and processing of abrasion resistant and high yield steel, have successfully introduced their high impact manganese steel ABRO M to the security doors market.

“A leading supplier of security doors has been using ABRO M as their preferred choice of steel due to its excellent wear resistant properties. With an average hardness of 200 HB, increasing to 500 HB with continued impact or compression, the ABRO M non-magnetic abrasion resistant steel plate provides excellent resistance to shock and impact”

Adrian Hance,  
Abraservice UK Divisional Director

The security doors produced are certified to LPS1175 SR3 and SR4 ratings which ensure the doors can withstand a deliberate and experienced attempt at forced entry. Products certified to SR3 level have resisted a series of professional attacks for up to 20 minutes using tools such as an axe, cold chisel, brick bolster or a crow bar with SR4 level rated doors withstanding attempts at forced entry for up to 30 minutes using high power cordless disc grinders, circular saws, power drills, jigsaw s or sledge hammers.

Doors under these categories are developed for use in high and very high risk areas.

The ABRO trade name, was established by the company over 20 years ago, and in addition to the security door market, the brand has worldwide appeal in a variety of other applications including shot blast hangers, drain cover grates, wear parts in crushers and magnetic separation equipment.

Abraservice UK were chosen by a leading supplier of security doors as the preferred supplier of ABRO M due to a comprehensive stock level that was available, processed and dispatched to meet agreed delivery times – a ‘just in time’ service.

Abraservice UK supply a diverse range of abrasion resistant and high yield steel plate, in an extensive number of grades and sizes. This coupled with full technical support and material selection advice ensures Abraservice UK provide cost effective, customer focused solutions to complex applications.

↘Key Technical Data
11-14 % manganese, non-magnetic, work hardening, abrasion resistant steel plate.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Shotblasting cabinets and furniture, crushers, anti-drill plates, magnetic separators and metal recycling industry.</th>
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</thead>
<tbody>
<tr>
<td>Hardness</td>
<td>200 HB as supplied &gt;500 HB in service</td>
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<tr>
<td>Composition</td>
<td>C  1.15  Mn  12.0  Si  0.50</td>
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<tr>
<td>Thickness Range</td>
<td>3-40mm</td>
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↘Benefits
- Excellent wear resistant properties
- Very high impact resistance
- Maintains a ductile structure for withstanding high shock loadings
- Hardness of 200 HB increasing to >500 HB in service
- Suitable for security applications in high and very high risk areas

↘Processing Facilities
- CAD/CAM Profiling
- Perforating
- Plasma Profiling
- Forming
- Laser Profiling
- Drilling and Countersinking
- Oxy-gas Profiling
- Bevelling
- DXF Compatible
- Welded Fabrications

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