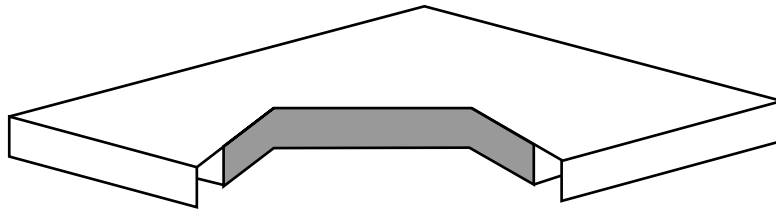
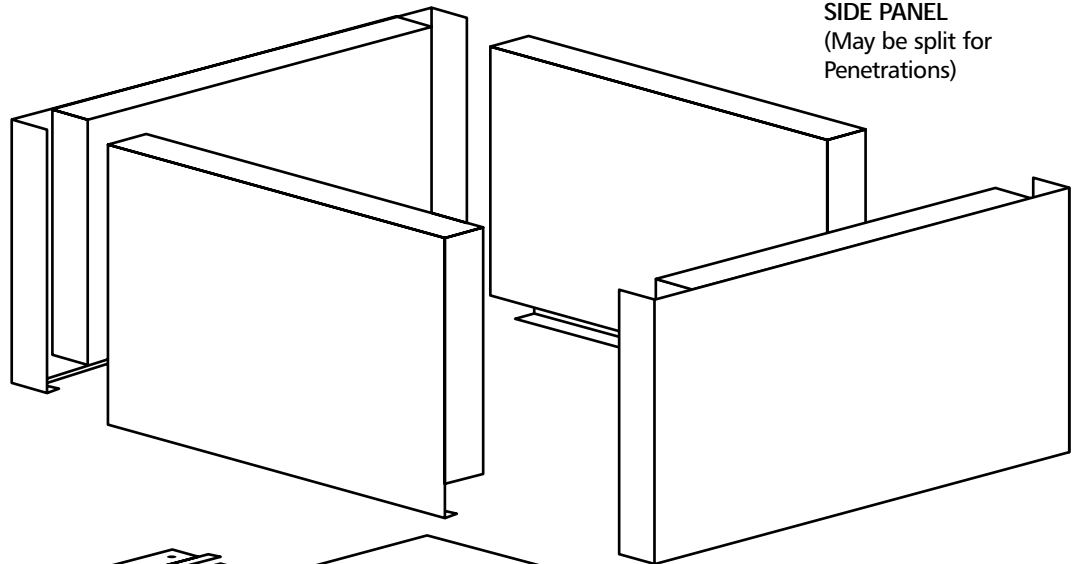


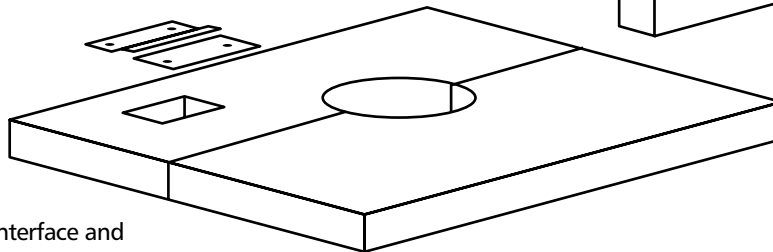
LID SECTION
(May be split for external
handwheel, etc.)



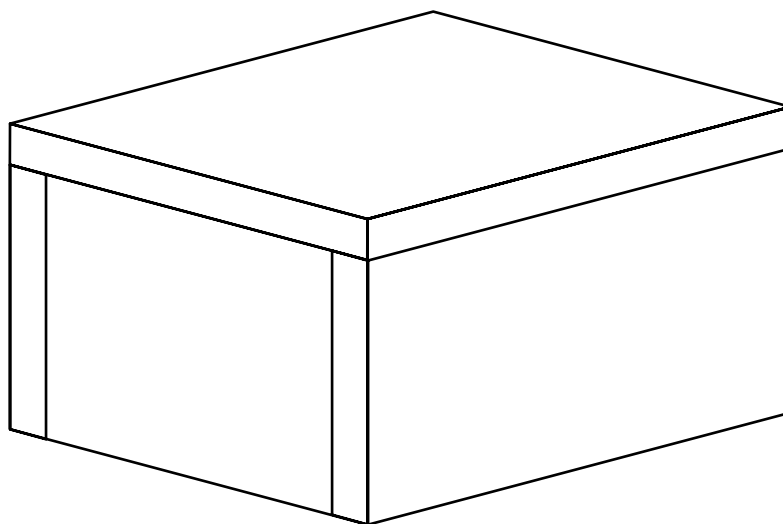
SIDE PANEL
(May be split for
Penetrations)



END PANEL
With interlock ends to
mate side panels. (May
be split for clutch lever
extensions, etc.)



BASE PANEL
Split for valve / actuator interface and
support flange arrangement



The Firemet Rigid Enclosure System has been extensively developed to provide fire protection to emergency shutdown valves, actuators, control stations, electrical junction boxes and other critical equipment located in hydrocarbon fire hazard areas. Design of the system is based on the hydrocarbon fire time versus temperature curve and considers the thermal mass of the equipment to be protected together with the constraints dictated by the time period of protection and the manufacturers surface temperature limitations for continued operation.

Performance of the enclosure system has been established in fire test procedures undertaken by independent test house operated by the Health & Safety Executive, the Loss Prevention Council (formerly FIRTO), Score (Europe) Ltd and TNO of Holland.

The more recently introduced increased stringency of safety standards, particularly in the offshore sector, has resulted in development and certification of the system up to H120 rating. Where blast over pressure is part of the design criteria, the stainless steel skins of the enclosure panels are braced with z-stiffeners in accordance with specified loadings. Where jet fire protection is required, evidence of the systems performance is given in a test report compiled following a full scale test carried out at the Spadeadam facility in Cumbria in 1990.

The enclosure system is constructed from high grade stainless steels and selected heat insulants. The enclosure is essentially a box of which each panel comprises two skins. The outer skin is grade 316 stainless steel and the inner is grade 304. Their respective thicknesses are typically 1.2mm and 0.7mm but these may vary according to particular design criteria and overall physical size.

Sandwiched between the steel skins is the thermal/fire barrier which may be a combination of silica aerogel and ceramic or silicate fibre. The thickness of each component part is varied according to the specified degree of protection required.

The two skins are braced and separated by tubular distance pieces and secured by stainless steel nuts and bolts. Panels are interlocked together and secured by set bolts. Heavy duty quick release toggle clips help provide a means of quickly removing a panel for, say, maintenance routines. Full fire integrity and hinged access doors may be provided for inspection routines.

All materials used in the construction of the enclosure are unaffected by normal working conditions and thus the enclosures are virtually maintenance free. No special tools are required in order to quickly and easily dismantle the enclosure for equipment maintenance.