



Ref.: EP010510-DVR-01

Rev.0

**DET NORSKE VERITAS**  
**DESIGN VERIFICATION REPORT**

**Designer/ Manufacturer:** Middle East Metal and Wood Industries Company  
**DNV Project No:** EP010510  
**Equipment Description:** Blast Resistant Door  
**Required Dynamic Resistance:** 10 psi  
**Design Codes and Standards:** AISC (9<sup>th</sup> Edition)

**This Is To Certify That:**

The structural design of Blast Resistant Door – drawing No. ABTC-03, sht 3/3, RevA - has been reviewed and found to comply with the Design Codes and Standards with regards to local in-place strength against static equivalent blast load of 10 psi.

**Validity Period:**

No validity period is stated on the design verification report as it only confirms the conformity with specified regulations / standards at the time of issue. Change in regulations or change in design may have influence on the validity.

**Scope of Verification:**

The verification of the design of Blast Resistant Door is limited to review of structural analysis for compliance with the major codes adopted in the project, AISC (9th Edition) with regards to maximum static equivalent blast load calculation and considering the plastic deformation.

DNV review is limited to the door itself. This review does not cover the design of concrete supports around the door.

**Conditions:**

1. Maximum static equivalent blast load: 10 psi (70 Kpa).
2. The door shall be supported by concrete in all four sides, the concrete width shall not be less than the door width and concrete depth shall not be less than 200 mm. The support weld shall be all around.

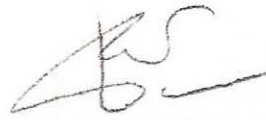


If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 300,000. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

Reference Documents:

Document No.	Rev.	Document Title	Status
ABTC-03 SHT 3/3	A	Anti blast door	Approved
ABTC-04	0	Door details	Approved
-	A	Blast door calculation	Reviewed

Signed for Det Norske Veritas, Abu Dhabi Branch



Fourman Marpaung  
Integrity Engineer



Amir Rasekhi Nejad  
Approval Engineer

Date: 03 Nov. 2009  
Place: Abu Dhabi, UAE