

Engineering Standard

SAES-A-109

30 October, 2002

Site Planning for Prayer Shelters

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Saudi Aramco DeskTop Standards

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1 Scope

This standard establishes the requirements for the orientation of all Musallas. This standard also provides a list of Saudi Aramco Library Drawings that can be used for the construction of standard 40-Man Musallas. The library drawings are to be used only for musallas that are not required to be blast resistant.

2 Conflicts and Deviations

- 2.1 Any conflicts between this Standard and other Saudi Aramco Engineering Standards (SAESs), Materials System Specifications (SAMSSs), Standard Drawings (SASDs) or industry standards, codes, and forms shall be resolved in writing by the Company or Buyer Representative through the Manager, Consulting Services Department, Saudi Aramco, Dhahran.
- 2.2 Direct all requests to deviate from this Standard in writing to the Company or Buyer Representative, who shall follow internal company procedure [SAEP-302](#) and forward such requests to the Manager, Consulting Services Department, Saudi Aramco, Dhahran.

3 References

The selection of material and equipment and the design, construction, maintenance and repair of equipment and facilities covered by this Standard shall comply with the latest edition of the references listed below, unless otherwise noted.

Saudi Aramco Standards

Saudi Aramco Engineering Procedure

[SAEP-302](#)

*Instructions for Obtaining a Waiver of a
Mandatory Saudi Aramco Engineering
Requirement*

Saudi Aramco Library Drawings

<i>DA-950087-001</i>	<i>Floor & Roof Plans and Section</i>
<i>DA-950087-002</i>	<i>Elevations</i>
<i>DA-950087-003</i>	<i>Door & Windows Schedule</i>
<i>DA-950088-001</i>	<i>Roof Framing Plan & Details</i>
<i>DA-950089-001</i>	<i>Foundation Plan & Details</i>
<i>DA-950090-001</i>	<i>HVAC Layout and Schedule</i>
<i>DA-950091-001</i>	<i>Lighting & Power Plans</i>

DA-950091-002

Electrical Schedules

DA-950091-003

Electrical Miscellaneous Details

4 General

It is Saudi Aramco practice to provide Musallas for its employees in the various camps, work areas and field installations. The specific sites of such permanent structures should be selected carefully with particular attention being given to the employee requirements.

5 Musalla Orientation

- 5.1 Musallas shall be oriented to point in the direction of Makkah.
- 5.2 When differences arise as to the correct direction to Makkah, the orientation approved by the religious authority in the District concerned shall be followed.
- 5.3 Orientation Data

Location	Direction to Makkah
Abqaiq	S 63 degrees 30' W
Abu Hadriya (Well No. 1)	S 55 degrees 30' W
Airfield, Dhahran	S 62 degrees 50' W
'Aziziyah	S 63 degrees 30' W
Dammam	S 62 degrees 00' W
Dhahran-camp	S 62 degrees 45' W
Fadhili(Well No. 1)	S 57 degrees 45' W
Hafar al-Batin	S 38 degrees 30' W
Haradh	S 72 degrees 00' W
Hofuf	S 66 degrees 30' W
Jabrin	S 77 degrees 30' W
Jubail	S 58 degrees 15' W
Khobar	S 62 degrees 45' W
Khurais (Well No. 1)	S 64 degrees 30' W
Manifa (Crane)	S 53 degrees 45' W
Nariya	S 52 degrees 45' W
Qaisumah	S 42 degrees 30' W
Qaryat al-'Ulya	S 49 degrees 30' W
Qaryat al-Sufla	S 51 degrees 00' W

Qatif	S 61 degrees 30' W
Ras al-Mish'ab	S 49 degrees 45' W
Ras Tanura (Najmah, Rahimah)	S 60 degrees 45' W
Ras Tanura – Terminal	S 61 degrees 00' W
Riyadh	S 63 degrees 00' W
Safaniya	S 51 degrees 00' W
Safwa	S 60 degrees 45' W
Saihat	S 61 degrees 30' W
'Udhailiyah Camp	S 67 degrees 15' W
'Uthmaniyah (Jebel)	S 66 degrees 30' W
Wari'ah	S 47 degrees 45' W

6 Saudi Aramco Library Drawings

The following library drawings may be used for the construction of standard 40-Man Musallas. These drawings are suitable for Musallas that are not required to be blast resistant. The drawings may also be used for Musallas in plant areas provided that they are modified to remove all windows and are not required to be blast resistant.

<i>DA-950087-001</i>	<i>Floor & Roof Plans and Section</i>
<i>DA-950087-002</i>	<i>Elevations</i>
<i>DA-950087-003</i>	<i>Door & Windows Schedule</i>
<i>DA-950088-001</i>	<i>Roof Framing Plan & Details</i>
<i>DA-950089-001</i>	<i>Foundation Plan & Details</i>
<i>DA-950090-001</i>	<i>HVAC Layout and Schedule</i>
<i>DA-950091-001</i>	<i>Lighting & Power Plans</i>
<i>DA-950091-002</i>	<i>Electrical Schedules</i>
<i>DA-950091-003</i>	<i>Electrical Miscellaneous Details</i>

Revision Summary

30 October, 2002

Revised the "Next Planned Update". Reaffirmed the contents of the document, and reissued with editorial changes.