

PETRONAS TECHNICAL STANDARDS

DESIGN OF PRE ENGINEERED BUILDINGS

PTS 34.17.10.36

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PTS Title:	Design of Pre-Engineered Buildings

This new PTS **34.17.10.36 – Design of Pre Engineered Buildings (September 2011, Revision 0)** has been developed to support materials building design and structural requirement for PETRONAS worldwide project especially in remote area.

This PTS also includes PETRONAS Lessons Learnt and PETRONAS Best Practice for the subject matter **PreEngineered Buildings**.

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PREFACE

PETRONAS Technical Standards (PTS) publications reflect the views, at the time of publication, of PETRONAS OPU/Divisions.

They are based on the experience acquired during the involvement with the design, construction, operation and maintenance of processing units and facilities. Where appropriate they are based on, or reference is made to, national and international standards and codes of practice.

The objective is to set the recommended standard for good technical practice to be applied by PETRONAS' OPU in oil and gas production facilities, refineries, gas processing plants, chemical plants, marketing facilities or any other such facility, and thereby to achieve maximum technical and economic benefit from standardization.

The information set forth in these publications is provided to users for their consideration and decision to implement. This is of particular importance where PTS may not cover every requirement or diversity of condition at each locality. The system of PTS is expected to be sufficiently flexible to allow individual operating units to adapt the information set forth in PTS to their own environment and requirements.

When Contractors or Manufacturers/Suppliers use PTS they shall be solely responsible for the quality of work and the attainment of the required design and engineering standards. In particular, for those requirements not specifically covered, it is expected of them to follow those design and engineering practices which will achieve the same level of integrity as reflected in the PTS. If in doubt, the Contractor or Manufacturer/Supplier shall, without detracting from his own responsibility, consult the owner.

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1. INTRODUCTION

1.1 SCOPE

This PTS specifies the minimum requirements and gives recommendations for the engineering building elements, fabrication and erection of new Pre engineered buildings in oil refineries, gas plants, chemical plants, power generation plants, utility plants, onshore exploration and production facilities.

Additional requirements for specific buildings are specified in the following documents:

Minimum requirements for structural Design and Engineering	PTS 34.00.01.32
Minimum requirements for Design and Engineering building	PTS 34.17.00.30
Analyzer houses	PTS 32.31.50.13
Laboratories	PTS 34.17.10.31
Substations and switch houses	PTS 33.64.10.10
Blast Resilient and Blast Resistant Control Buildings	
/Field Auxiliary Rooms	PTS 34.17.10.30
Workshops	PTS 70.08.10.11, PTS 70.08.10.13
Guide to the Warehousing of Chemicals	PTS 30.06.10.46
Assessment of the Fire Safety of Onshore Installation	PTS 80.47.10.30
Active Fire Protection System and Equipment for Onshore Facilities	PTS 80.47.10.30
Fire Fighting Agents and Movable Fire Fighting Equipment for Onshore Facilities	PTS 80.47.10.30
Fire Fighting Vehicles and Fire Station	PTS 80.47.10.33
Standard Drawing S 17.001	
Standard Drawing S 17.002	
Standard Drawing S 68.040	

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

Unless otherwise authorized by PETRONAS, the distribution of this document is confined to companies forming part of PETRONAS or managed by a Group company, and to Contractors nominated by them.

This PTS is intended for use in oil refineries, gas plants, chemical plants, onshore exploration and production facilities and, where applicable, supply/marketing installations.

If national and/or local regulations exist in which some of the requirements may be more stringent than in this PTS, the Contractor shall determine by careful scrutiny which of the requirements are the more stringent and which combination of requirements will be acceptable as regards safety, economic and legal aspects. In all cases the Contractor shall inform the Principal of any deviation from the requirements of this document which is considered to be necessary in order to comply with national and/or local regulations. The Principal may then negotiate with the Authorities concerned with the object of obtaining agreement to follow this document as closely as possible.