

Process Industry Practices
Structural

PIP STF05501
Fixed Ladders and Cages Fabrication Details

PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

In an effort to minimize the cost of process industry facilities, this Practice has been prepared from the technical requirements in the existing standards of major industrial users, contractors, or standards organizations. By harmonizing these technical requirements into a single set of Practices, administrative, application, and engineering costs to both the purchaser and the manufacturer should be reduced. While this Practice is expected to incorporate the majority of requirements of most users, individual applications may involve requirements that will be appended to and take precedence over this Practice. Determinations concerning fitness for purpose and particular matters or application of the Practice to particular project or engineering situations should not be made solely on information contained in these materials. The use of trade names from time to time should not be viewed as an expression of preference but rather recognized as normal usage in the trade. Other brands having the same specifications are equally correct and may be substituted for those named. All Practices or guidelines are intended to be consistent with applicable laws and regulations including OSHA requirements. To the extent these Practices or guidelines should conflict with OSHA or other applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by the Practice.

This Practice is subject to revision at any time.

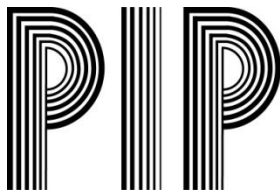
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PUBLISHING HISTORY

<i>November 1994</i>	<i>Issued</i>
<i>December 1999</i>	<i>Revision</i>
<i>August 2000</i>	<i>Technical Correction</i>
<i>February 2002</i>	<i>Technical Correction</i>
<i>October 2012</i>	<i>Complete Revision</i>

Not printed with State funds

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1. Introduction

1.1 Purpose

This Practice provides fabrication details for fixed ladders and cages.

1.2 Scope

This Practice describes requirements for fabricating typical OSHA-regulated fixed ladders and cages for open structures, miscellaneous platforms, and vessels for regular operational access and egress.

2. References

Applicable parts of the following Practices, industry codes and standards, and government regulations shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles are used herein where appropriate.

2.1 Process Industry Practices (PIP)

- PIP STI03310 - *Concrete Typical Details*
- PIP STS05120 - *Structural and Miscellaneous Steel Fabrication Specification*

2.2 Industry Codes and Standards

- ASTM International (ASTM)
 - ASTM A36/A36M - *Standard Specification for Carbon Structural Steel*
 - ASTM A307 - *Standard Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength*

2.3 Government Regulations

The following government document has been used as a reference in the development of this Practice.

- U.S. Department of Labor (DOL) - Occupational Safety and Health Administration (OSHA)
 - *Regulations 29 CFR 1910 Subpart D (Walking-Working Surfaces)*

3. Definitions

contract documents: Any and all documents, including codes, studies, design drawings, specifications, sketches, practices, and data sheets, that the purchaser or engineer of record has transmitted or otherwise communicated, either by incorporation or reference, and made part of the legal contract agreement or purchase order between the purchaser and the structure/platform fabricator, ladder fabricator and/or vessel manufacturer.

design drawings: Drawings produced by the structure/platform engineer and/or the vessel engineer that show the structure, vessel, platform, and ladder and cage arrangements and details

engineer of record: Purchaser's authorized representative with overall authority and responsibility for the engineering design, quality, and performance of the civil works, structure,