

Engineering Standards Update

Topics this month: March 2006

This is the monthly newsletter of the LANL Engineering Standards Program. The Standards are mandatory documents that define the minimum design criteria, fabrication, and installation practices to ensure that the design, repair, and alteration of LANL facilities, and the programmatic equipment within them. [IMP 342]

Topics this month:

- Spec Renumbering Complete
- Drafts for Labwide Review
- LANL Standards Issued in February

The Standards Homepage: http://engstandards.lanl.gov/

SPEC RENUMBERING COMPLETE

In February, LANL changed its Master Spec sections to the 50-division, 6+ digit, numbering scheme.

The new specs are Rev 0 and have a spec date of 1/6/06 or later. The new spec numbers are 6-or 8-digits and are segmented; e.g., 31 2000 and 31 2323.33 are Div 31 specs. The new specs/numbers should be used for all new project starts.

Crosswalks to locate a new spec using its old 5-digit number (and visa-versa) are provided on the specs webpage. Old spec versions are available from the History/Archive link on the webpage.

The Rev 0 specs are technically identical to their superseded, pre-2006 ancestors. Two exceptions: the specs on Filters and Surge Protective Devices were split up into two separate specs addressing dissimilar parts of the original spec scope (see crosswalk for mapping), and other technical changes were made. Additional spec splitting may occur in the future -- e.g., since there are now multiple mechanical divisions, each may get a spec on hangers and supports versus the single spec that was put in the division where it is most used.

DRAFTS FOR LABWIDE REVIEW

A revised Structural Chapter is available for labwide review until Mar 13. This revision will significantly reduces the content in Section II for PC 1 and PC 2 structures systems and components. It now points to the IBC and eliminates many details to eliminate any misconception that the ESM is a stand alone document; it is meant to work with ASCE 7 and the IBC. The other sections have minor changes as well.

These documents are available on the <u>homepage</u> via the bold <u>Drafts in Review</u> link near the lower right. Please send comments to POC Mike Salmon; the comment form is on the Drafts webpage.



Engineering Standards Update

Topics this month: March 2006

LANL STANDARDS ISSUED IN FEBRUARY

LANL Engineering Standards Manual ISD 342-1

Chapter 1 General

Section Z10, General Requirements for All Disciplines/Chapters Rev. 3 dated 2/1/06

Appendix A: Technical Baseline Drawings Guidance

Appendix B: Technical Baseline Deliverables (New Facilities)

Appendix C: Design Deliverable Schedule 15-30-60-90/100% (Projects over \$500K)

<u>Appendix D</u>: Facility Design Descriptions (New Facilities)

Appendix E: Life Cycle Cost Methodology Guidance

Added Design Goals and life cycle costing guidance (App E). Added drawing CM category suggestions (App A) and baseline deliverables tables (to App B) formerly in CM LIR along with MDL requirements. Added Shed requirements. Added 15-30-60-90/100 requirements (App C). Added App D, FDD Requirements. Relocated interpretation and variance section and attached forms from Ch 1 Section 100. Deleted detailed backfit requirements now in AP.

Chapter 1 Section 230, r6, 2/1/06, Equipment/Component Functional IDs (acronyms) -- Minor revisions

Section <u>100</u>, Standards Administration by Standards Team Rev. 5 dated 2/1/06 Made a purely Stds Team doc by moving user info like NCR/variance details to Z10

Chapter 7 Electrical

§ D5030, Communications Rev. 2 dated 2/1/06

Added telecommunications requirements for conference rooms, copy rooms and parking structures; updated requirements for protected transmission systems; updated requirements for administrative access control and security systems (when Chapter 9 – Security is published, those requirements will supersede); updated references; title change.

Chapter 13, Welding -- Volume 1 General Welding Standards

GWS <u>1-02</u>, ADMINISTRATIVE CONTROL OF WELDING & BRAZING, r0 dated 2/1/06 -- Added weld inspection requirements and form

Att. 3: Weld Inspection Record (Excel file)

GWS <u>1-11</u>, INSPECTOR QUALIFICATION - VISUAL AND NDE Rev. 1 dated 2/1/06 -- Added weld inspection requirements

Chapter 13, Volume 3 -- Welding Procedure Specs

7000-PVDF Rev.1 2/22/06 7000-PPE Rev. 0 2/22/06

10000-PVC Fabric Rev. 0 2/13/06



Engineering Standards Update

Topics this month: March 2006

LANL Master Specifications Manual ISD 342-2

<u>Specification Requirements Section 100-200</u> Rev. 1, dated 2/21/06 -- New ISD title reflects spec applicability to all LANL work per IMP 342, conversion to 50 divisions

Spec Section Changes (in addition to renumbering all per above)

07 3113 R1 Asphalt Shingles – General references updating, and deletion of surplus material requirement.

08 5113 R1 Aluminum Windows - Updated referenced standards

09 2913 R0 Gypsum Roof Board -- NEW

10 1410 R0 Signage, Interior -- NEW

26 4123 R0 Lightning Protection Surge Arresters and Suppressors (formerly part of 16289)

26 4313 R0 Transient Voltage Suppression for Low-Voltage Electrical Power Circuits (formerly part of 16289)

To request a change to this newsletter's distribution contact Tobin Oruch, oruch@lanl.gov.

Previous issues of this Update are available; click "Monthly Update" below the Google search on the Standards homepage http://engstandards.lanl.gov/

Tobin Oruch, Eng Standards Mgr (on Schedule A)

Los Alamos Nat'l Lab -- ENG Div, Chief Eng Offc

Mailstop M990 ph (505) 665-8475 fax 606-0581

oruch@lanl.gov <u>http://engstandards.lanl.gov/</u> ov <u>http://engstandards.lanl.gov/</u>

Page 3 of 3 Web Posted Update-Mar06.doc