

ENGINEERING DIVISION SOP NUMBER ????
Design Analysis Format and Storage

1. PURPOSE:

This SOP provides guidance for properly formatting and storing a Design Analysis (DA).

2. APPLICABILITY:

This SOP applies to all Engineering Division (ED) employees who are involved in the writing or compiling a Design Analysis.

3. REFERENCES:

Memorandum of Record (MFR). See attached.

4. RESPONSIBILITIES:

Engineering Division: Each EN employee is responsible for complying with the format on the attached MFR.

5. PROCEDURES - (for in-house personnel and construction field personnel):

a. The DA shall be formatted by the individual disciplines in accordance with the attached MFR. The latest copy of the format is stored in the following place on the Projects drive: M: \PROJECT\AFORMS\DA\DAEXMPL.DOC

b. The DA writer shall give a completed and properly formatted digital copy of the design analysis to the Project Architect/Engineer (PAE) by the date established by the PAE. Recommend attaching your DA to an e-mail with return receipt checked.

c. The PAE will review and correct the format of each DA as required.

d. Once the PAE has corrected the individual DA's, he/she will move the individual DA's to the following location:

M: \PROJECT\project cadd ID\DA\individual discipline DA.doc

e. The PAE will be responsible for making any changes so do not edit the DA's on the M: drive yourself. Simply make your changes known to the PAE's and they will make the changes.

MEMORANDUM FOR RECORD

SUBJECT: Standard Format for Design Analysis

1. This memorandum establishes the design analysis format for Engineering Division. Most all situations are covered by the memo. If format questions develop that are not covered by these rules, call Doug Cunningham at extension 4042.

2. Rules:

a. Font: **Courier New, Size 10** for all text and page numbering. This document is courier new 10 so make it look like this.

b. Two spaces below initial section title. **No** double spacing anywhere else.

c. **No** underlining.

d. **No** bold lettering.

e. Section titles shall **not** be all capitals.

f. Colon after all first level titles.

g. Margins:	Left	1.25"
	Right	0.75"
	Top	1.0"
	Bottom	1.0"

h. Page numbering: bottom center, courier new, size 10. Check to make sure it is the correct size and not bold. Note page numbering leads with section number.

i. The official mechanical sections are as follows. If you don't have your discipline's number call your project coordinator:

- IX-1-Heating, Ventilation and Air Conditioning
- IX-2-Plumbing
- IX-3-Fire Suppression
- IX-4-Special Considerations
- IX-5-Special Mechanical Systems and Equipment
- IX-6-Boiler Plants
- IX-7-Air Pollution Control and Equipment

j. Two spaces behind a paragraph letter or number. Do not tab after a paragraph number or letter.

k. Two spaces behind any period or colon.

l. One space behind a comma.

m. Tab settings at 0.5" increments.

n. Note the format of the "Specifications" paragraph. List your specs accordingly using a comma and a space after the specification number.

o. Refer to your PAE or lead discipline for official job title. Spell out the state's name. Do not abbreviate.

p. **Do not** use an indent unless you have a situation that typically occurs in the Design References section where you may have a wrap that leaves only one word next to the left margin. For example:

DO:

b. Architectural and Engineering Instructions, Office Chief Engineers
MDO.

DON'T:

b. Architectural and Engineering Instructions, Office Chief Engineers
MDO.

q. Example of "Parenthetical Hierarchy":

1. Title:

<tab> a. Text.....

<tab> <tab> (1) Text.....

<tab> <tab> <tab> (A) Text.....

Chapter IX-1-Heating, Ventilation and Air Conditioning
10% Design Submittal
(*****Official Job Title, MAKE SURE IT MATCHES*****)
MacDill AFB, Florida

1. Design References:

- a. 1989 A.S.H.R.A.E. Handbook of Fundamentals
- b. Architectural and Engineering Instructions, Office of the Chief of Engineers
- c. E.T.L. 94-4 Energy Usage Criteria for Facilities in the Military Construction Program
- d. A.S.H.R.A.E. Standard 62-89 "Ventilation For Acceptable Indoor Air Quality"
- e. N.F.P.A. Standard 90A
- f. S.M.A.C.N.A. HVAC Duct Construction Standards
- g. T.M. 5-785 Engineering Weather Data
- h. T.M. 5-815-3 Heating, Ventilating, and Air Conditioning (HVAC) Control Systems

2. Title:

<tab> a. Text.....

<tab><tab> (1) Text.....

<tab><tab><tab> (A) Text.....

3. Title: If you have only one paragraph associated with a section, simply follow the colon like I have done here. Don't suspend the text below.

4. Specifications:

- a. CEGS Section 15250, Thermal Insulation for Mechanical Systems
- b. CEGS Section 15895, Air Supply and Distribution System for Air Conditioning System