

## **Operations & Maintenance Manuals**

Prior to application for Substantial Performance, submit to Engineer, four (4) copies of Operations and Maintenance Manuals as follows:

### **Format**

1. Organize data in the form of an instructional manual.
2. Binders: vinyl, hard covered, 3 'D' ring, loose leaf 219 x 279 mm with spine and face pockets.
3. Enclose title sheet, labeled "Operations and Maintenance Manual" with project name, table of contents, date and names of Owner, Engineer and Contractor.
4. Organize contents into applicable sections of work to parallel project break down.
5. When multiple binders are used, correlate data into related consistent groupings. Identify contents of each binder on spine.
6. Cover: Identify each binder with type or printed title 'Operations and Maintenance Manual'; list title of project and identify subject matter of contents.
7. Arrange content by systems, process flow, under section numbers and sequence of Table of Contents.
8. Mark each section by labeled tabs protected with celluloid covers fastened to hard paper dividing sheets.
9. Include manufacturers & suppliers name, address, phone number, fax number, and contact person from every item contained in manual
10. Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
11. Text: Manufacturer's printed data, or typewritten data.
12. Neatly type lists and notes. Use clear drawings, diagrams or manufacturer's literature
13. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
14. All operation and maintenance manuals to be submitted in English only

## Contents – Each Volume

1. Table of Contents:
2. Provide title of project;
3. Date of submission;
4. Names, addresses and telephone numbers of Engineer and Contractor with names of responsible parties;
5. schedule of products and systems, indexed to content of volume;
6. For each product or system: list names, addresses and telephone numbers of Sub-Contractors and suppliers, including local source of supplies and replacement parts;
7. Product Data: Mark each sheet to clearly identify specific products and component parts and data applicable to installation; delete inapplicable information;
8. Maintenance instructions for exterior and interior floor, wall and ceiling surfaces as well as all installed fittings as printed by manufacturer;
9. Colour schedule;
10. Hardware schedule;
11. List of spare parts, special tools and maintenance materials for each piece of equipment as applicable;
12. Copies of all guarantees and warranties;
13. Copies of all testing and commissioning reports;
14. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams;
15. Complete set of final approved shop drawings, bound separately, indicating corrections and changes made during fabrication and installation;
16. WHMIS Manual containing MSDS information for all products supplied; and
17. Typewritten Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified.