

**LIGHTING DESIGN STANDARDS**  
(based on ADC Standards of Practice)

**Definitions:**

"*Lighting*" shall include but not be limited to: the selection of the direction, colour and intensity of light to be used in the production, as well as the placement and duration of all light cues and effects to be used in the production, in consultation with the director.

"*Preliminary design requirements*" are defined as including a description of the basic lighting approach, a rough inventory of equipment, special rigging, general specifications of any special lighting effects and sufficient further information which is required to enable the theatre to estimate costs, with the understanding that these Preliminary Designs reflect the discussions among the designer(s), the director and the theatre.

"*Completed Design Requirements*" are defined as including all plots, schedules, specifications and working drawings that the Theatre requires for detailed costing and execution of the design.

"*Approved Design*" is defined as the total lighting for the production and all pertinent documentation required for the execution of same, to the satisfaction of the Designer, the Director and the Theatre. In any case, approval is deemed to have been reached at the completion of the opening performance or the date of the Designer's residency period.

**Communication Standards:**

1. The light hanging plot is the primary graphic tool used to convey the precise information needed to rig a lighting design.
2. A centre line vertical section should accompany the light hanging plot when any of the mounting positions or masking are variable with respect to position of vertical trim.
3. Technical drawings should be clean, clear and inscribed on a standard drafting medium.
4. Each drawing should be framed by a border.
5. Recommended scales for light hanging plots and sections are: 1:25, 1:50, ¼"=1'-0", or ½"=1'-0".
6. The legend block on all drawings should be in the lower right hand corner of the page and should include the following information:
  - a. Production title and date
  - b. Theatre space
  - c. Producer
  - d. Director
  - e. Designers - sets and lighting

- f. Drawing title
  - g. Scale
  - h. Drawn by
  - i. Date
  - j. Drawing #
7. All lettering should be clear, neat and read from one direction regardless of the lamp direction.
8. The key should contain the following information:
- a. An example of every type of luminaire used, with identification listing:
    - type of luminaire
    - wattage, quartz or incandescent, etc.
    - fixture count of each type
  - b. A typical fixture labelling all symbols and numbers used, as: colour, gobo, barn door, iris, instrument, dimmer, circuit, channel, etc.
  - c. A colour medium key
9. There are various international lighting templates currently in use in Canada. The delineation of the specific units, i.e. 6x12, 6x16, etc., is up to the individual designer, as long as each type is properly indicated in the key. The minimum information that should accompany lamp symbol is:
- a. Instrument number, shown inside the body of the unit
  - b. Accessory symbol, i.e. gobo, iris, etc.
  - c. Two-fering
- OPTIONAL INFORMATION may include:
- d. Colour
  - e. Dimmer #
  - f. Circuit #
  - g. Wattage
  - h. Focus
10. The sequential numbering of instrument locations and mounting positions should follow the method practised in the industry.

Locations:

- setting line to upstage
- setting line to downstage
- reference to SL or SR of cl for such locations as booms, ladders, floor units, etc.

Positions:

- SL to SR for horizontal locations, i.e. electrics, bridges, FOH
- Top to bottom for vertical locations, i.e. booms, ladders

11. The following are recommended as sources:
  - Handbook of Stage Lighting Graphics, Warfel, Wm. B., New York, Drama Book Specialists, 1974.
  - United States Institute of Theatre Technology

## **Recommended Working Procedures**

### *Preliminary Design -*

1. Preliminary designs should be presented, discussed and approved prior to doing the completed designs. Written cost estimates should be provided by the theatre.
2. It is the responsibility of the lighting designer to provide sufficient information in the following areas to allow the Theatre to cost the design:
  - a. Rough inventory of equipment or of additional equipment
  - b. Special rigging or mounting positions
  - c. General specifications for any special lighting effects
  - d. Rough inventory of colour media, gobos, etc.

### *Completed and Approved Design -*

1. The light hanging plot should include these details:
  - a. Centre Line
  - b. Prosc. or Setting Line
  - c. A Scaled Ruling
  - d. Line plot or flyline index (if applicable) showing:
    - number of line sets available
    - total listing of all hanging goods
    - listing of all electrics pipes indicating the number , and
    - trim of each pipe
  - e. Horizontal mounting positions should be shown as a double continuous line broken by the instrument symbol.
  - f. Vertical locations should be indicated in their correct placement, in "phantom" view, that is, drawn as a dashed outline or hatched solid of the top units(s). Detailed instrument positions may be shown by:
    - displaced orthographic projection
    - isometric elevation
    - fold-out view
  - g. A label for each mounting location, giving name and number of the location, and flyline number if applicable. Optional information may include:
    - trim height
    - number of circuits required
    - total of each type of unit required
  - h. Deck electrics and practicals may be listed or shown on a separate sheet or on a groundplan.
  - i. An indication of work lights and house lights (if applicable)

- j. Special rigging details, bumpers, trapeze pipes, etc.
  - k. A minimum indication of venue architecture or scenery that does not obstruct the unit symbols or information
2. The centre line section should include these recommended details:
    - a. Permanent architectural fixtures
    - b. Flyline index, if applicable
    - c. Sightline indications for masking
    - d. Graphic representation of:
      - location of all electric pipes, showing trims and largest type hung on each pipe.
      - location and size of borders and legs
      - any other objects that affect rigging or masking
    - e. Trim heights, indicated on the flyline index or by use of a scale should be drawn and labelled.
  3. The instrument schedule should list all lighting units numerically by mounting position. Columns should be provided listing:
    - a. Location
    - b. Instrument number
    - c. Dimmer
    - d. Circuit
    - e. Type of unit
    - f. Focus
    - g. Colour
    - h. Two-fering
    - i. Extras ie: gobos
    - j. Notes
  4. The dimmer schedule should list all units, grouped by dimmer. Columns should be provided listing:
    - a. Dimmer
    - b. Location
    - c. Inst.#
    - d. Number and type of units
    - e. Total wattage
    - f. Colour
    - g. Focus
    - h. Extra notes
  5. It is the responsibility of the Lighting Designer to provide sufficient information in the following areas to permit the design to be realized:
    - a. A colour media cutting list stating each colour and the number of pieces for each frame size.
    - b. A special accessory list detailing gobos, effects wheels etc.
    - c. An equipment list detailing all required equipment such as lamps, barn

doors and any other plans and specifications necessary for the realization of the lighting design

6. An outline of the cueing format, prepared in consultation with the Director should be provided.

Information to be Provided to the Designer

1. Any concepts which require the lighting designer to light in a prescribed manner should be discussed with the lighting designer.
2. All plans and lists provided to the set designer.
3. A full set of technical drawings for the production.
4. A complete inventory of pertinent equipment including type, wattage, projection equipment, dimmer capacity, circuits, etc.
5. A complete inventory of gells, gobos, etc.
6. Colour swatches of all costumes and accessories in the show (upon request).