

ETC Application Note

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Application Note #

115-B

ETC Application Notes are designed to provide specific helpful information regarding ETC's technology or about solving a problem using ETC equipment.

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Designing Cyc Wash Applications with Selador Fixtures

ETC's Selador fixtures provide a way to wash a cyclorama (cyc) smoothly, using much less electrical energy. LED technology means lower HVAC costs due to lower heat and removes the need for maintenance and material costs to replace lamps and color media. Additionally, the traditional Red-Green-Blue fixture method provides only a limited color palette. Selador's x7 Color System gives the lighting designer an entire swatchbook of colors for the cyc.

Purpose:

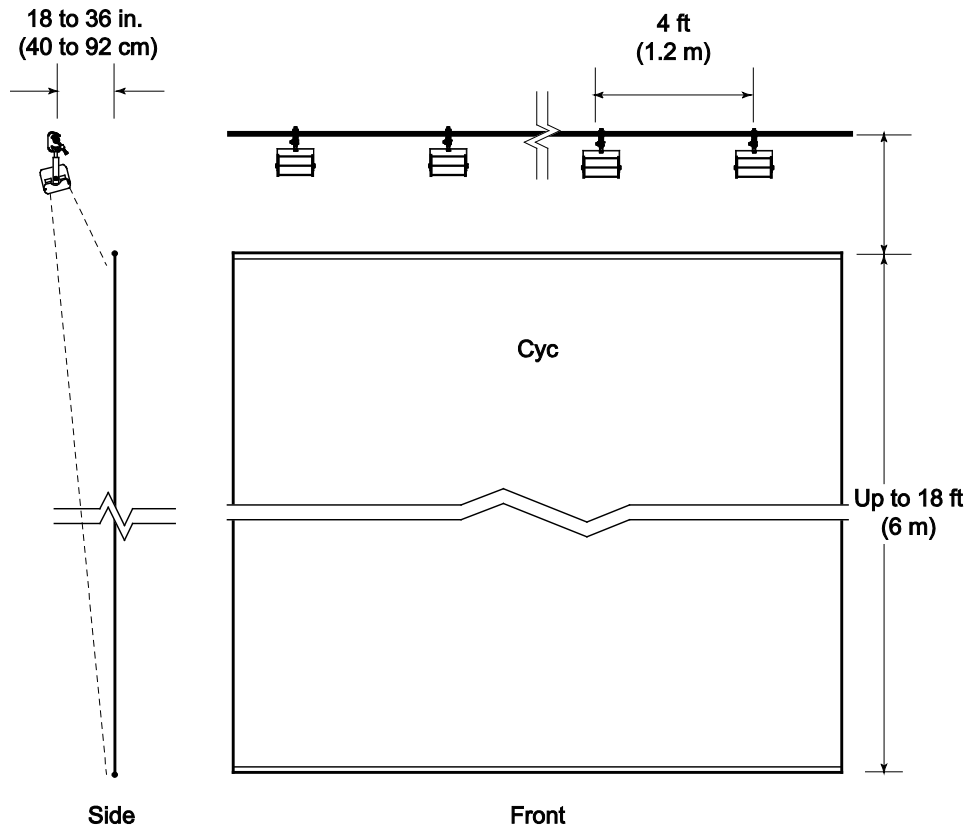
This paper describes the suggested placement of Selador Series LED fixtures to wash cycs.

- **IMPORTANT:** For best results, Selador fixtures need to be trimmed from 4 to 6 ft. (1 to 2 m) over the top visible area of the cyc. Some unevenness and scalloping will occur in the area from 0 to 6' from the fixture. Similarly, floor-mounted fixtures will produce acceptably even coverage beginning at somewhere between 4 to 6 ft. (1 to 2 m) from the floor.
- Rosco 104 or equivalent diffusion media used with recommended lenses will lessen the scalloping and make it possible to trim the fixtures closer to the visible cyc. When used on floor mounted fixtures, it will lessen the scalloping at the bottom of the cyc. Orient the diffusion media for up and down spread.
- Maximum cyc heights for *Better* and *Best* solutions are not called out. These results were based on tests with a 24 ft. (7 m) high cyc. Thirty foot (9 m) and higher cycs can probably be well lit with *Better* and *Best* solutions depending on light level requirements.
- A distance of 18 to 30 in. (40 to 76 cm) from the cyc surface seemed to be the sweet spot for good, even lighting. This distance eliminates the need for vertical lenses and the resulting light loss from double lensing.
- Other combinations are possible – the suggestions below gave good results in the tests.

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Budget Solution – Up to 18 ft. (5 m) high visible cyc area maximum:

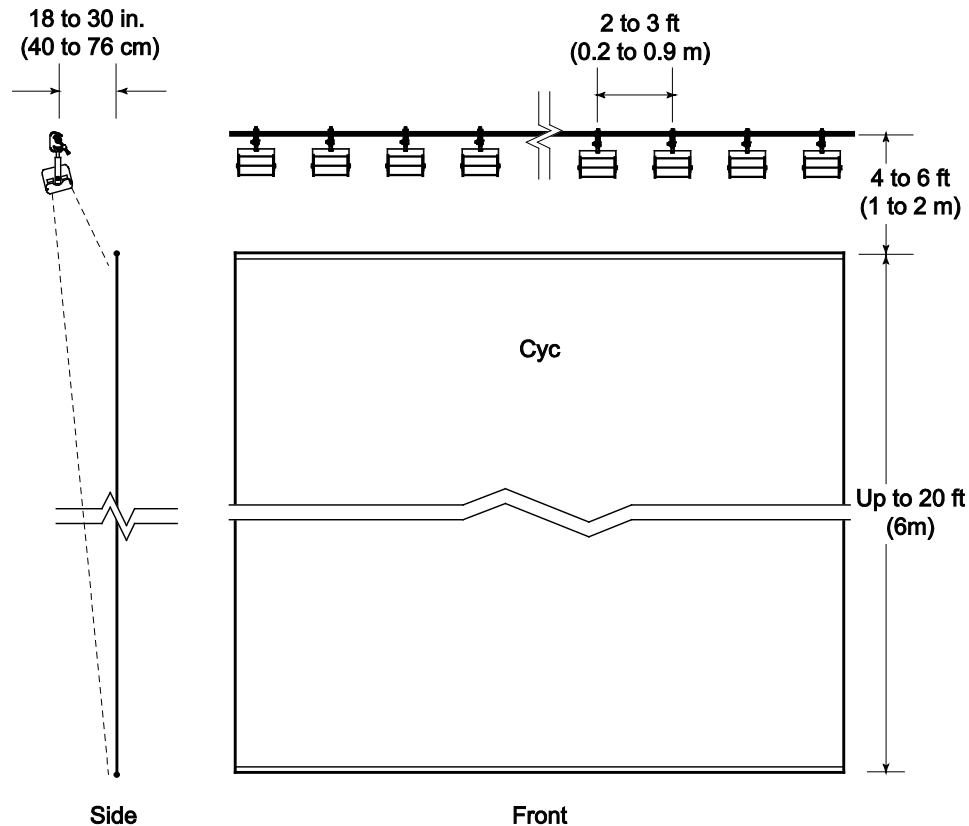


- 11 in. (28 cm) Paletta fixtures on 4 ft. (1.2 m) CL spacing, placed 18 to 36 in. (40 to 92 cm) from the cyc.
- Ten 11 in. (28 cm) fixtures for a 40 ft. (10 m) cyc (visible area).
- Suitable for school and other installations with lower trim heights and where lower costs are important and high light levels are not a requirement.
- Will be seen as a great improvement over R40 striplights with rondells or scoop fixture cyc lighting.
- Use H60 or H80 lenses in combination with Rosco 104 or equivalent diffusion media for best results in this configuration. Orient the diffusion media for up and down spread.

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Smart Saver – 18 to 20 ft. (5 to 6 m) high visible cyc area maximum:

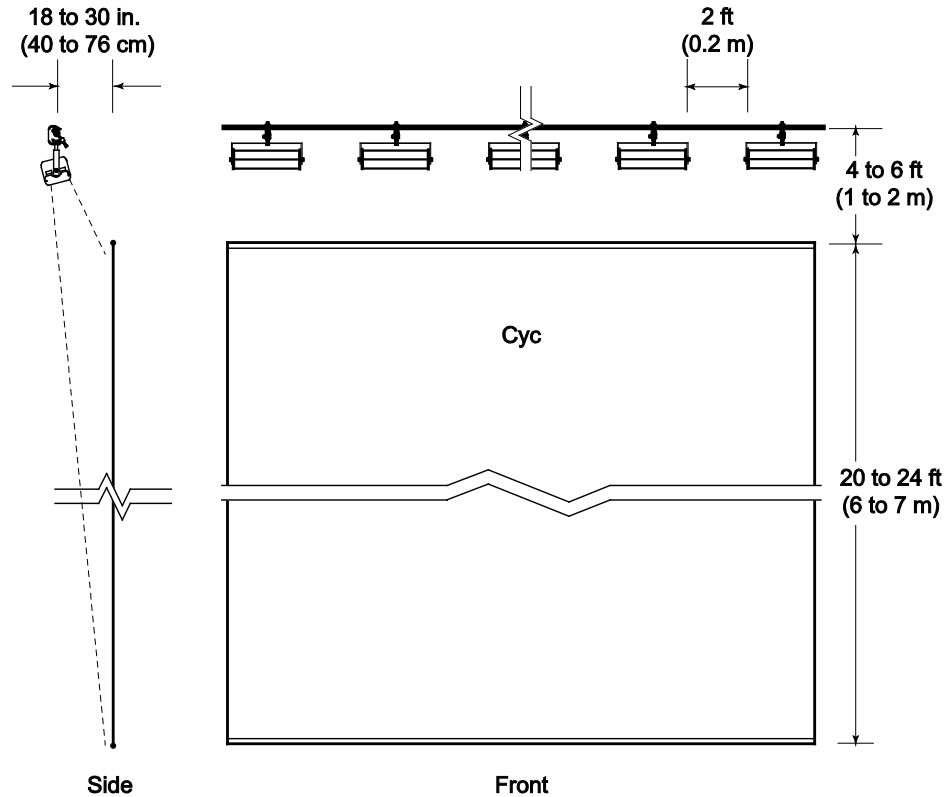


- 11 in. (28 cm) Vivid or Paletta fixtures on 2 to 3 ft. (0.2 to 0.9 m) CL spacing, placed 18 to 30 in. (40 to 76 cm) from the cyc.
- Fifteen 11 in. (28 cm) fixtures for a 40 ft. (10 m) cyc (visible area).
- Suitable for school and other installations where lower costs are important and high light levels are not a requirement.
- Will be seen as a great improvement over R40 striplights with rondells or scoop fixture cyc lighting.
- H70 or H80 lenses.

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Good – 20 – 24 ft. (6 to 7m) high visible cyc area maximum

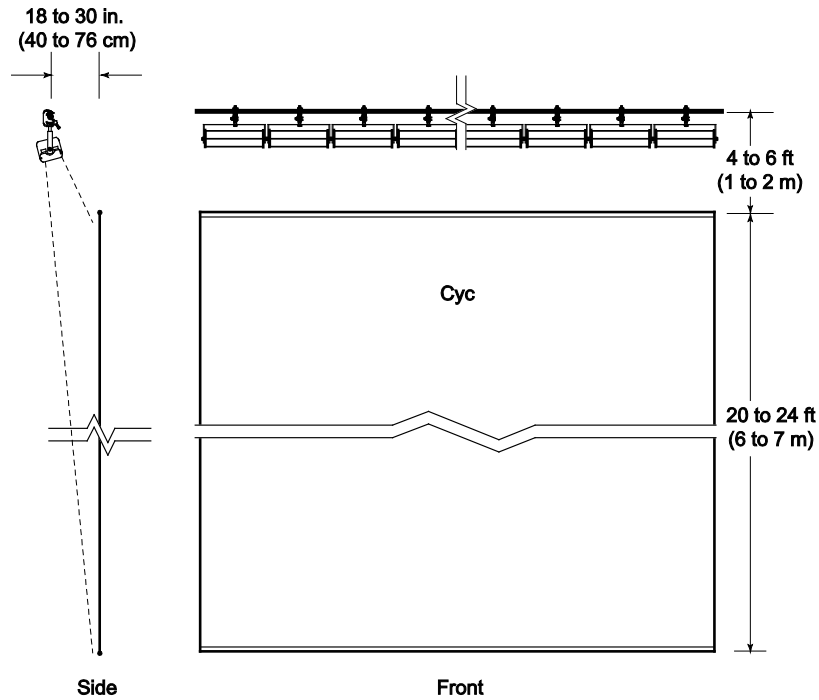


- 42 in. (110 cm) Vivid fixtures on 5.5 ft. (1.7 m) centers 2 ft. (0.2 m) spacing between each fixture) placed 18 to 30 in. (40 to 76 cm) from the cyc.
- Six 42 in. (110 cm) fixtures for a 40 ft. (10 m) wide (visible area) cyc.
- Good brightness for most applications.
- H60, H70 or H80 lenses.

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Better – 24 ft. (7 m) and higher visible cyc area

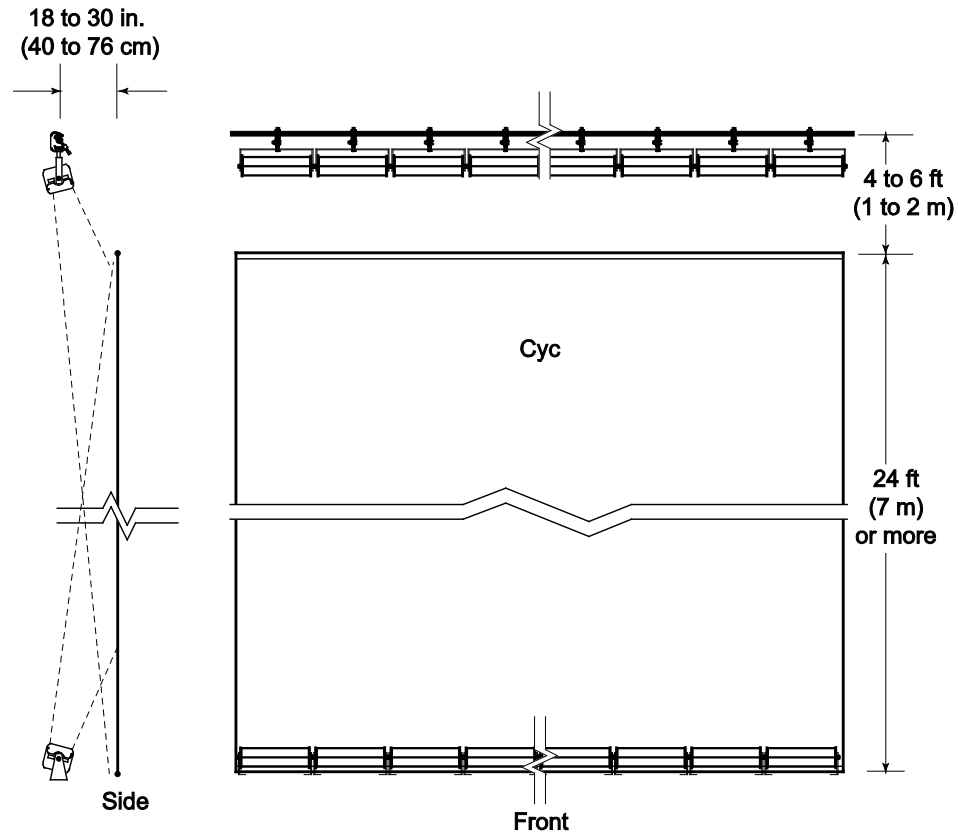


- Continuous 42 or 63 in. (110 or 160 cm) fixtures placed 18 to 30 in. (40 to 76 cm) from the cyc.
- Ten 42 in. (110 cm) fixtures for 40 ft. (12 m) wide (visible area) cyc.
- H 30 or H40 lenses.

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Designing Cyc Wash Applications with Selador Fixtures

Best – 24 ft. (7 m) and higher visible cyc area



- As above but with both top and bottom fixtures.
- Excellent high brightness and strong color washes for all applications.
- Top level professional applications and cycs higher than 24 ft. (7 m).
- Twenty 42 in. (110 cm) fixtures for 40 ft. (40 m) wide (visible area) cyc.
- H 30 or H40 lenses.