Screens

Types

Manual - for small classrooms <50 capacity (unless power specified)
Powered - for larger (50+) capacity rooms or where specified. LV controller to be specified included in the screen housing.

Size

Calculation
Width of projected image = 1/4 distance to furthest viewer

Typical

Small classroom <50 capacity	8’ wide screen (image <=8’ wide)
Med classroom 50-100 capacity	10‘ wide
Lecture Hall 100-200 capacity	12’ wide
Large Lecture Hall 200-300 capacity	14‘ wide
Large Lecture Theatre 300+ capacity	16’ wide +

Brands

DaLite products typically specified.
Cosmopolitan - (rather than side-tensioned screens) due to more durable screen finish
CSR (controlled screen return) - increased screen life in manual screen

Aspect Ratio

Design for 4:3 format.
16:9 is industry standard for TV/film projection, 4:3 remains typical for academic presentation.
For durability in 8‘manual screens, order 8’x8‘.

Dual Screen

Single screen typical unless specified for room
Primary screen centre, second screen on side away from instructor
Dual screen projection provides flexibility in that it allows for:
- Simultaneous projection of pre-set slides and live document camera / overhead notation
- Use of side-screen only for maximum available blackboard with projection

Location

Horizontal
- 0 students outside of viewing cone (see viewing cone standard)
- Typical in small classroom is 2’ off-centre away from instructor
- Typical in large lecture hall is centre
- Typical dual screen is centre with second screen on far side away from instructor
- Minimum 6’ blackboard visible when screen down (prefer 8’+)
- If fixed Teaching Station/podium, so that the Instructor position does not block any student view of screen. Teaching Station unit itself is below 4’6 and does not block view of screen

Vertical
- Base of projection min. 4‘6 from floor.
- Typical small classroom screen mounted as high as possible, with housing inset above finished ceiling level
- Large lecture hall image base at 6’ (over instructor head) only if allows front row to view top of screen at acceptable angle (max. 30 deg. from eye level) (see diagram sample)

Screen mount min. 6” from projection wall to allow clearance for chalk tray behind

See room front standards for options for cove (inset housing above finished ceiling level) or for ceiling height requirements

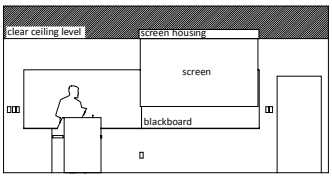
Blocking

TBD by project.
Typical 5-sided box inset above finished ceiling level to hold screen housing above finished ceiling level. Box to be independent of drop ceiling of suitable construction for mounting screen housing. See room front standards.

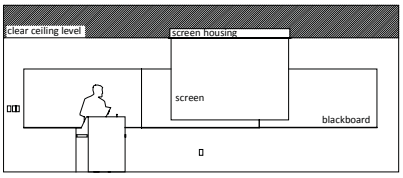
Conduit / LV

- Conduit and power for screen to go to left side at screen, in ceiling
- LV controlled to be built into screen housing, located on left side
- Conduit to Teaching Station (floor trench) or wall unit (Wall Access Panel) for digital raise/lower
- Conduit to lv manual wall switch for power screens.

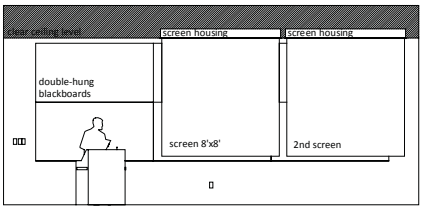
Typical Screen location



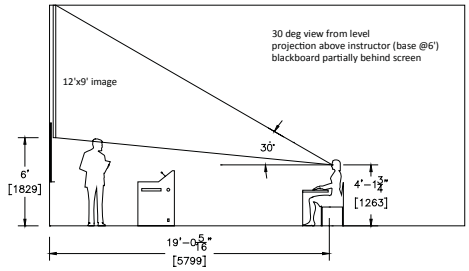
small classroom,
limited presentation wall area



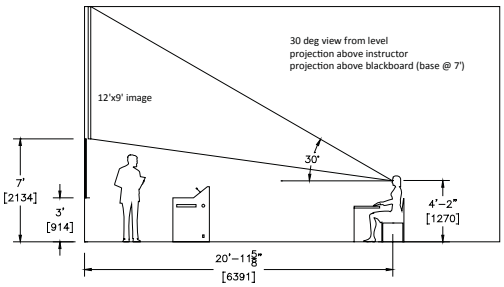
small classroom
wide presentation wall



case room
dual screen
double hung blackboards



side view
large hall
sample distance requirement
for screen mount above
instructor

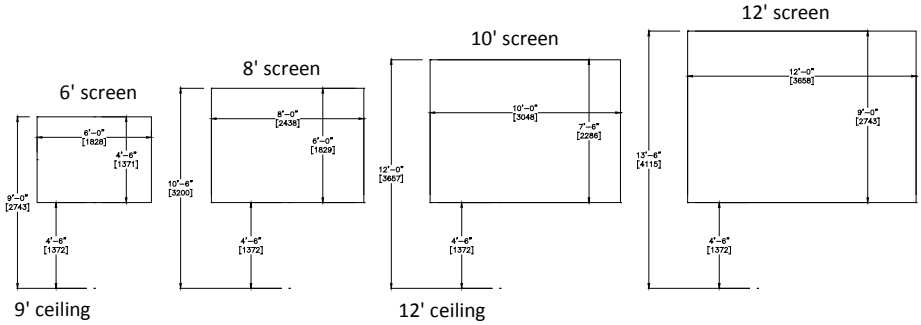


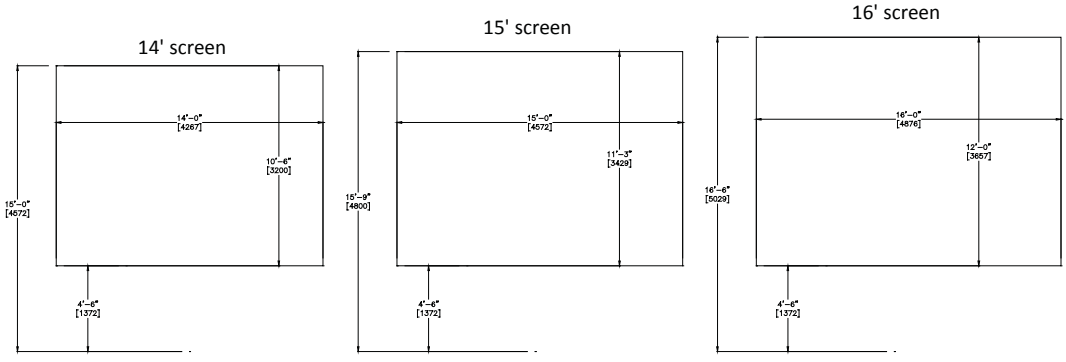
side view
large hall
sample distance requirement
for screen mount above
blackboard

Standard Screen Widths

* ceiling height shown is minimum, with screen housing inset above clear ceiling level

Clear ceiling height min.	Projected image width (screen width)
9’	6’
10’6	8‘
12’	10‘
13’6	12‘
15’	14‘
16’6	16’
18	18’





Standard Ceiling Heights

* ceiling height shown is minimum, with screen housing inset above clear ceiling level

Clear ceiling height	Max. projected image width
9’	6’
10	7‘4
11’	8‘8
12’	10‘
13’	11‘4
14’	12’8
15‘	14’
16’	15‘4
17’	16’8
18’	18’