



HBEAM 1.25

THE HARMONIC COLLECTION | ACOUSTICS

HB1.25SA | CONTINUOUS SPOTLIGHTS OR LINEAR LAMPING | SUSPENDED INTEGRAL OR REMOTE DRIVER

DIMENSIONS

1.25" Aperture, 2.25" Total Width
2ft - 8ft straight sections

LAMPING

Specify lambing with continuous spotlights or linear light
LED - Direct & Indirect - 80/90 CRI - 2700K/3000K/3500K/4000K
Output Options: MIN/LOW/MED/HI/MAX/RGB

FINISH

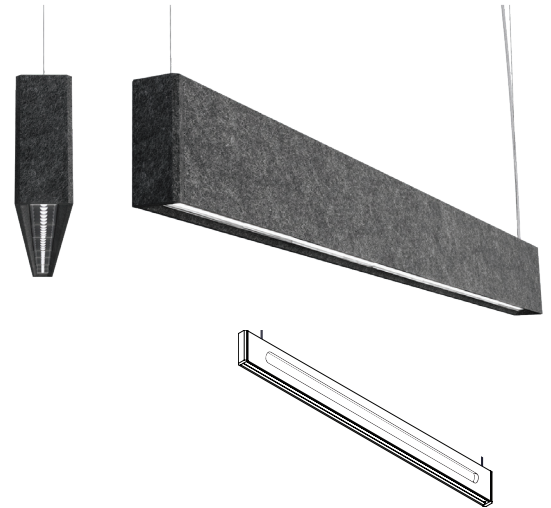
16 standard finishes available at no extra charge
Custom finishes available

CONSTRUCTION

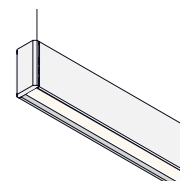
Extruded 6063-T5 Aluminum
0.5" PET polyester felt
PET felt conforms to ASTM E84 Class A and EN13501-1 Class B fire ratings. PET felt is 100% recyclable at end of life use

SPECIFYING FOR WELL™?

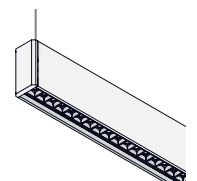
See pages 10-11 for recommended options that contribute to meeting the WELL Building Standard™.



Customize with acoustic design cutouts



Continuous Linear



(SL) Continuous Spotlights



enlighted

vive by LUTRON

HB1.25XSA – SPECIFICATIONS
SUSPENDED, WALL, SURFACE

ALW-INC.COM



PRODUCT SUBMITTAL WORKSHEET

SAMPLE PRODUCT CODE

HB1.25XSA — **CAP/M** — **S8** — **N** — **N** — **N** — **SL/MED/90/3500/25** — **0/10V/S** — **MED/90/3500** — **0/10V/S** — **EXT** — **ACW** — **DCSTM** — **GW** — **GW** — **UNV**
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
— **EMB/1** — **ENLGHT/1** — **COMBO** — **SB**
17a 17b 17c

1. BASE MODEL (CHOOSE ONE)

REMOTE DRIVER

☐ **HB1.25SA** 1.25" Aperture, 2.25" Total Width Suspended Acoustic - Remote Driver

INTEGRAL DRIVER

☐ **HB1.25XSA** 1.25" Aperture, 2.25" Total Width Suspended Acoustic - Integral Driver



Suspended

2. END CAP (CHOOSE ONE)

- ☐ **CAP/M** Metal End Cap. Add an aesthetic touch with a brushed or powder coated end cap.
☐ **CAP/A** Acoustic End Cap

*Metal end caps are not available for Indirect Only lighting.



Metal End Cap



Acoustic End Cap

3. NOMINAL LENGTH (CHOOSE ONE)

- ☐ **S2** 2' (24") section
☐ **S3** 3' (36") section
☐ **S4** 4' (48") section
☐ **S5** 5' (60") section
☐ **S6** 6' (72") section
☐ **S7** 7' (84") section
☐ **S8** 8' (96") section

*Lengths are nominal. To ensure lengths match the exact lengths of other fixtures and/or sound baffles on the project it's recommended to include all products on a single purchase order, provide a RCP (Reflective Ceiling Plan), and any additional details for ALW to review.

*Lengths longer than 8ft. available as a custom solution, contact ALW or a quote.

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4. LED LAMPING — LINEAR/DIRECT (CHOOSE NONE OR ONE UNDER A, B, & C, AS NECESSARY)

☐ **N** None. Select when direct lamping is not desired or when specifying continuous spotlights.

A. OUTPUT

- ☐ **MIN**
☐ **LOW**
☐ **MED**
☐ **HI**
☐ **MAX**
☐ **RGB¹**

B. CRI²

- ☐ **80**
☐ **90**

C. CCT²

- ☐ **2700K**
☐ **3000K**
☐ **3500K**
☐ **4000K**

DELIVERED LUMENS (LM)	WATTS (W)	EFFICACY (LM/W)
See page 12 for complete details.		Up to 89 lm/W

¹Not available for base model fixtures with integrated drivers.

²CRI/CCT not applicable for RGB lamping.

5. DRIVER³ — LINEAR/DIRECT (CHOOSE ONE. X/STD, STD, TUNE, RGB(W) TABLE INDICATES COMPATIBLE LED LAMPING)

	X/STD ^{5,6}	STD ⁶	RGB	
☐ N				None. Select when direct linear lamping is not desired.
☐ 0/10V/S⁴	●	●		0-10V dimming down to 5% (Standard Dimming — Down to 10% for TUNE lamping)
☐ 0/10V/1%⁴	●	●		0-10V dimming down to 1%
☐ 0/10V/0%⁴	●	●		0-10V premium dimming down to 0%
☐ TRC/1%⁴	●	●		TRIAC 2-wire forward-phase dimming down to 1%
☐ ELV/1%⁴	●	●		ELV 3-wire reverse-phase dimming down to 1%
☐ ECOSYS1		●		(LDE1) Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
☐ DALI		●		DALI flicker-free dimming down to 0%
☐ DMX		●	●	DMX flicker-free dimming down to 0%

³Driver specifications provided upon request.

⁴0/10V/S, 0/10V/1% 0/10V/0%, TRC/1%, and ELV/1% may be specified as an integral driver or remote driver option. Choose the appropriate Base Model for driver location.

⁵X/STD = Integral Driver with Standard Lamping.

⁶Lutron Vive Control Systems are compatible only with X/STD and STD lamping. See more information for compatible Driver under 'Sensor Options'.

6. LENS — LINEAR/DIRECT (CHOOSE ONE)

- ☐ **N** None. Select when specifying continuous spotlights or when direct lamping is not desired. Cover plate provided to match housing finish.
- ☐ **EXT** Extra diffuse, white frosted



7. LED SPOTLIGHT — (CHOOSE NONE OR ONE UNDER A, C, & D)

- ☐ **N** None. Select when specifying linear lamping or when direct lamping is not desired.
- ☐ **SL** Continuous (ALL) spotlights. *Must select NONE for Linear/Direct Lamping. Select options (A-D) below.*

A. OUTPUT B. CRI C. CCT D. BEAM SPREAD

- ☐ **MIN** ☐ **80** ☐ **2700K** ☐ **25°**
- ☐ **LOW** ☐ **90** ☐ **3000K** ☐ **40°**
- ☐ **MED** ☐ **3500K**
- ☐ **HI⁷** ☐ **4000K**

⁷Not available for base model fixtures with integrated drivers.

DELIVERED LUMENS (LM)	WATTS (W)	EFFICACY (LM/W)
See page 12 for complete details.		Up to 83 lm/W

8. DRIVER⁸ — SPOTLIGHT (CHOOSE ONE. X/STD, STD, TUNE, RGB(W) TABLE INDICATES COMPATIBLE LED LAMPING)

	X/STD ^{10,11}	STD ¹¹
☐ N		None. Select when direct lamping is not desired.
☐ 0/10V/S⁹	●	0-10V dimming down to 5% (Standard Dimming — Down to 10% for TUNE lamping)
☐ 0/10V/1%⁹	●	0-10V dimming down to 1%
☐ 0/10V/0%⁹	●	0-10V premium dimming down to 0%
☐ TRC/1%⁹	●	TRIAC 2-wire forward-phase dimming down to 1%
☐ ELV/1%⁹	●	ELV 3-wire reverse-phase dimming down to 1%
☐ DALI	●	DALI flicker-free dimming down to 0%
☐ DMX	●	DMX flicker-free dimming down to 0%

⁸Driver specifications provided upon request.

⁹0/10V/S, 0/10V/1%, 0/10V/0%, TRC/1%, and ELV/1% may be specified as an integral driver or remote driver option. Choose the appropriate Base Model for driver location.

¹⁰X/STD = Integral Driver with Standard Lamping.

¹¹Lutron Vive Control Systems are compatible only with X/STD and STD lamping. See more information for compatible Driver under 'Sensor Options'.

9. LED LAMPING — LINEAR/INDIRECT (CHOOSE NONE OR ONE UNDER A, B, & C, AS NECESSARY)

- ☐ **N** None. Select when direct lamping is not desired or when specifying continuous spotlights.

A. OUTPUT B. CRI¹³ C. CCT¹³

- ☐ **MIN** ☐ **80** ☐ **2700K**
- ☐ **LOW** ☐ **90** ☐ **3000K**
- ☐ **MED** ☐ **3500K**
- ☐ **HI** ☐ **4000K**
- ☐ **MAX**
- ☐ **RGB¹²**

¹²Not available for base model fixtures with integrated drivers.

¹³CRI/CCT not applicable for RGB lamping.

DELIVERED LUMENS (LM)	WATTS (W)	EFFICACY (LM/W)
See page 12 for complete details.		Up to 117 lm/W

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10. DRIVER¹⁴ — LINEAR/INDIRECT (CHOOSE ONE. X/STD, STD, TUNE, RGB(W) TABLE INDICATES COMPATIBLE LED LAMPING)

	X/STD ^{16, 17}	STD ¹⁷	RGB	
☐ N				None. Select when direct lamping is not desired.
☐ 0/10V/S¹⁵	●	●		0-10V dimming down to 5% (Standard Dimming — Down to 10% for TUNE lamping)
☐ 0/10V/1%¹⁵	●	●		0-10V dimming down to 1%
☐ 0/10V/0%¹⁵	●	●		0-10V premium dimming down to 0%
☐ TRC/1%¹⁵	●	●		TRIAC 2-wire forward-phase dimming down to 1%
☐ ELV/1%¹⁵	●	●		ELV 3-wire reverse-phase dimming down to 1%
☐ ECOSYS1		●		(LDE1) Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
☐ DALI		●		DALI flicker-free dimming down to 0%
☐ DMX		●	●	DMX flicker-free dimming down to 0%

¹⁴Driver specifications provided upon request.

¹⁵0/10V/S, 0/10V/1%, 0/10V/0%, TRC/1%, and ELV/1% may be specified as an integral driver or remote driver option. Choose the appropriate Base Model for driver location.

¹⁶X/STD = Integral Driver with Standard Lamping.

¹⁷Lutron Vive Control Systems are compatible only with X/STD and STD lamping. See more information for compatible Driver under 'Sensor Options'.

11. LENS —LINEAR/ INDIRECT (CHOOSE ONE)

- ☐ **N** None. Select when indirect lamping is not desired
- ☐ **EXT** Extra diffuse, white frosted

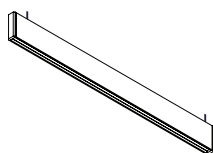
12. ACOUSTIC COLOR (CHOOSE ONE. SEE PAGE 14 FOR LARGER SWATCHES AND ADDITIONAL INFORMATION)

STANDARD COLORS

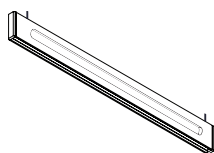
☐ ACW	☐ Crystal White	☐ AIW	☐ Ivory White
☐ AMW	☐ Marble White	☐ AAG	☐ Aloe Green
☐ AHG	☐ Heather Gray	☐ ATO	☐ Titan Orange
☐ ACG	☐ Charcoal Gray	☐ ASR	☐ Scarlet Red
☐ AJB	☐ Jet Black	☐ AMB	☐ Midnight Blue

13. ACOUSTIC DESIGN (CHOOSE ONE)

- ☐ **N** None. Choose for a solid acoustic fixture.
- ☐ **DCSTM** Custom Design Cutout (See template on page 9)



N = Solid Acoustic



DCSTM = Custom Design Cutout



14. FINISH - FIXTURE (CHOOSE ONE. SEE PAGE 15 FOR LARGER SWATCHES AND ADDITIONAL INFORMATION)

Get creative with two layers of color! Add an Acoustic Design (step 14) and fixture paint finish. Viewer will see the fixture paint color behind the acoustic design cutout.

STANDARD FINISHES

- | | |
|------------------------------------|--|
| ☐ SW | ☐ Satin White |
| ☐ SB | ☐ Satin Black |
| ☐ AS | ☐ Aluminum Silver Anodized Effect |
| ☐ TB | ☐ Textured Black |

PREMIUM FINISHES

BASIC POWDER COAT

- | | |
|--|--|
| ☐ GW | ☐ Gloss White |
| ☐ AW  | ☐ Antimicrobial Gloss White |
| ☐ TW | ☐ Textured Matte White |

METALLIC POWDER COAT

- | | |
|------------------------------------|--|
| ☐ CG | ☐ Charcoal Grey |
| ☐ CU | ☐ Copper |
| ☐ BR | ☐ Brass |

SATIN ANODIZED EFFECT POWDER COAT

- | | |
|------------------------------------|--|
| ☐ OB | ☐ Oil-Rubbed Bronze |
| ☐ DB | ☐ Dark Bronze |

GLOSS POWDER COAT (80-95% GLOSS)

- | | |
|------------------------------------|---|
| ☐ GO | ☐ Orange RAL 2003 |
| ☐ GR | ☐ Red RAL 3020 |
| ☐ GM | ☐ Magenta RAL 4010 |
| ☐ GB | ☐ Blue RAL 5015 |

SPECIAL ORDER FINISHES

- | | |
|---|--|
| ☐ RAL _____ |  Specify RAL Classic Color (Ex: RAL 3003) - Most RAL Colors are available for powder coat. See www.alw-inc.com/finishes |
| ☐ CCM _____ |  Custom Color Match - Specify a custom powder coat color match |

15. FINISH — END CAP (CHOOSE ONE. SEE PAGE 15 FOR LARGER SWATCHES AND ADDITIONAL INFORMATION)

STANDARD FINISHES

- | | |
|------------------------------------|--|
| ☐ N | None. Select when specifying an Acoustic End Cap. |
| ☐ SW | ☐ Satin White |
| ☐ SB | ☐ Satin Black |
| ☐ AS | ☐ Aluminum Silver Anodized Effect |
| ☐ TB | ☐ Textured Black |

PREMIUM FINISHES

BASIC POWDER COAT

- | | |
|--|--|
| ☐ GW | ☐ Gloss White |
| ☐ AW  | ☐ Antimicrobial Gloss White |
| ☐ TW | ☐ Textured Matte White |

METALLIC POWDER COAT

- | | |
|------------------------------------|--|
| ☐ CG | ☐ Charcoal Grey |
| ☐ CU | ☐ Copper |
| ☐ BR | ☐ Brass |

SATIN ANODIZED EFFECT POWDER COAT

- | | |
|------------------------------------|--|
| ☐ OB | ☐ Oil-Rubbed Bronze |
| ☐ DB | ☐ Dark Bronze |

GLOSS POWDER COAT (80-95% GLOSS)

- | | |
|------------------------------------|---|
| ☐ GO | ☐ Orange RAL 2003 |
| ☐ GR | ☐ Red RAL 3020 |
| ☐ GM | ☐ Magenta RAL 4010 |
| ☐ GB | ☐ Blue RAL 5015 |

SPECIAL ORDER FINISHES

- | | |
|---|--|
| ☐ RAL _____ |  Specify RAL Classic Color (Ex: RAL 3003) - Most RAL Colors are available for powder coat. See www.alw-inc.com/finishes |
| ☐ CCM _____ |  Custom Color Match - Specify a custom powder coat color match |

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16. VOLTAGE (CHOOSE ONE)

- ☐ **UNV** Universal Voltage (120VAC-277VAC)
☐ **347¹⁸** 347 Volt (Driver options may be limited)

¹⁸Not available for base model fixtures with integrated drivers. Also not available for with EMB.

17. ADDITIONAL OPTIONS (OPTIONAL — CHOOSE ONE UNDER A & B, AND ANY UNDER C, IF DESIRED)

A. EMERGENCY OPTIONS

- ☐ **EMB/___^{19,20}** Emergency Battery (indicate quantity — each battery powers up to a 4ft section)
☐ **EMC/___²⁰** Emergency Circuit (indicate quantity of 4ft sections to be illuminated by emergency circuit)

¹⁹Not available for base model fixtures with integrated drivers.

²⁰For fixtures under 4ft in length, entire fixture will be illuminated with a proportional lumen output. Consult ALW for available options.

B. SENSOR OPTIONS (DEFAULT QUANTITY IS 1 SENSOR PER 8FT, INDICATE ALTERNATE QUANTITY IF DESIRED)

- ☐ **FCJS/___²¹** Lutron® Vive remote RF wireless fixture control (Lutron Part: FCJS-ECO or FCJS-010)
☐ **FCJS/S/___²¹** Lutron® Vive remote RF wireless fixture control + daylight/occ sensor (Lutron Part: FCJS-ECO or FCJS-010, & FC-Sensor)
☐ **ENLGHT/___²²** Enlighted® remote connected lighting smart sensor (Enlighted Part: SU-5S-H) (occupancy, daylight, networking, and more)
☐ **OS/___** 0-10V remote occupancy sensor
☐ **PH/___** 0-10V remote photocell/daylight sensor

²¹Lutron® Vive remote sensors are compatible with the following drivers: 0/10V/S or 0/10V/1. Programming required by Lutron Commissioner.

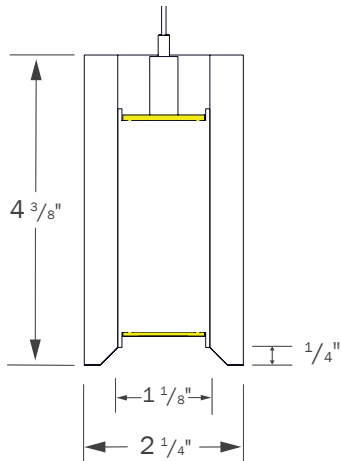
²²Enlighted® sensors are compatible with the following drivers: 0/10V/S or 0/10V/1. Programming required by Enlighted Commissioner. Additional Enlighted sensor families included IoT Sensors and Enlighted One Sensors are also available as a custom order but not available as a QuickShip option. Contact Customer Support for more information.

C. ADDITIONAL OPTIONS (COMPATIBLE ONLY WITH SUSPENDED MODELS)

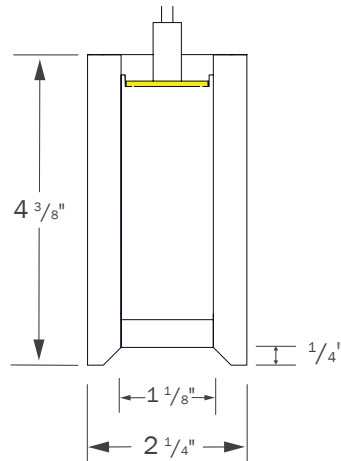
- ☐ **COMBO** Combination 4.5" canopy at power feed locations to accommodate both power cord & suspension mount hardware.
☐ **SB** Seismic Bracing

MECHANICAL DIAGRAMS

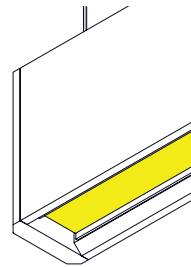
DIRECT OR DIRECT/INDIRECT



INDIRECT ONLY

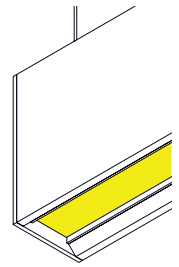


ACOUSTIC END CAP



Available with Direct, Indirect, or Direct/Indirect Lamping. When Indirect Only is specified an acoustic lid will be installed on the direct lamping side.

METAL END CAP



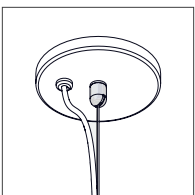
Available with Direct or Direct/Indirect Lamping. Metal end caps are not available for Indirect Only Lamping.

SUSPENSION MOUNTING



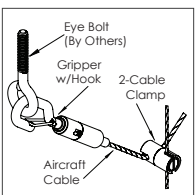
CEILING HARDWARE

- (1) 4.5" canopy per power feed location,
- (1) bullet mount,
- (1) 8' aircraft cable
- (1) 2" canopy (for use with T-bar mounting) per suspension point



COMBO CANOPY

Choose option COMBO to specify 4.5" canopies at feed locations with power feed and aircraft cable suspension mounting. Canopy finish is always white. Contact ALW for alternate colors.



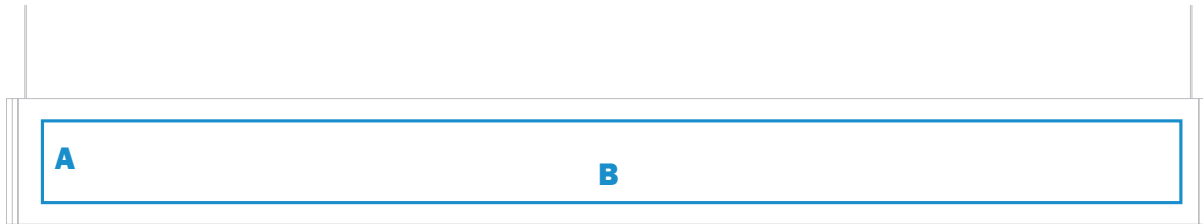
SEISMIC BRACING

Add-on hardware includes cable gripper with hook, 2-cable clamp and specified length of aircraft cable per suspension point.

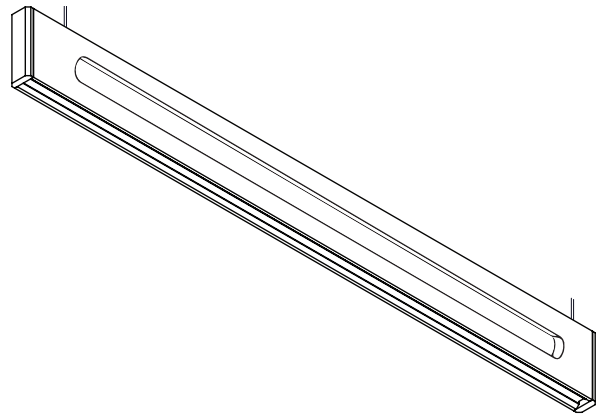


CUSTOM ACOUSTIC PATTERNS

Choose from a solid sound absorbing baffle or create your own custom designs by following the instructions and template guidelines below. Gray areas indicate templates for acoustic pattern cutouts.



DIMENSION	BASE MODEL	CUT OUT AREA
A	HB1.5SA - 4.375" height	2.375"
B	S2 - 2' (24") length	22"
	S3 - 3' (36") length	34"
	S4 - 4' (48") length	46"
	S5 - 5' (60") length	58"
	S6 - 6' (72") length	70"
	S7 - 7' (84") length	82"
	S8 - 8' (96") length	94"



**Lengths are nominal. To ensure lengths match the exact lengths of other fixtures and/or sound baffles on the project it's recommended to include all products on a single purchase order, provide a RCP (Reflective Ceiling Plan), and any additional details for ALW to review.*

HOW TO SUBMIT YOUR CUSTOM ACOUSTIC PATTERN?

1. DOWNLOAD THE ACOUSTIC CUSTOM PATTERN .ZIP FILE ON THE PRODUCT PAGE

Open the appropriate .ai (Adobe Illustrator) or CAD .dxf file.

2. INPUT YOUR DESIGN WITHIN THE TEMPLATE AREA.

Template area will be marked with a dashed perimeter.

3. SAVE YOUR FILE. INCLUDE THE PROJECT NAME AND OTHER SUPPORTING INFO AT THE END OF THE FILE NAME.

For example, "HB1.5SA Custom Acoustic Design Template - Project ALW".

4. SUBMIT FORMS BELOW TO ALW FOR REVIEW.

1. Acoustic Design Template File
2. Product Code and Quantities

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SPECIFYING FOR THE WELL BUILDING STANDARD™ - WELL™

ALW is committed to providing the highest quality luminaires for a multitude of applications, with many versatile lighting solutions that contribute to satisfying the WELL Building Standard. WELL is currently transitioning from WELL V1 to WELL V2. Below is a quick guide to assist you in specifying appropriate product configurations for WELL V2 features. Links to official WELL standards can be found here: [WELL V1](#) & [WELL V2](#).

GLARE CONTROL WELL V2: FEATURE L04

Glare is defined as excessive brightness of a light-source, excessive brightness-contrasts and excessive quantities of light. Glare has been associated with a host of health issues that range from visual discomfort and eye fatigue to headaches and migraines.

To conform to Glare Control requirements, each luminaire must meet one of the following options (a, b, or d) for regularly occupied spaces.

GLARE CONTROL CRITERIA (3PT MAX)	COMPLIANT	VALUE	HOW TO SPECIFY
a. Indirect (100% emission above horizontal)	✓	100%	1. Select N (None) for LED LAMPING - DIRECT 2. Select any of the options for LED LAMPING - INDIRECT
b. Unified Glare Rating (UGR)*	✓	10.00 @ 16ft (HI Output, 25° Spots) 10.00 @ 20ft (HI Output, 25° Spots) 14.93 @ 16ft (HI Output, 40° Spots) 10.00 @ 20ft (HI Output, 40° Spots)	1. Select N for LED LAMPING - LINEAR/DIRECT 2. Select an output of MIN, LOW, MED, or HI for LED SPOTLIGHT - DIRECT 3. Select 25° or 40° for LED SPOTLIGHT - DIRECT
c. Shielding Angle	No	-	-
d. Max. Luminance (45°-90°) Max. Intensity (45°-90°)	✓	2517 cd/m ² @ HI Output, 25° Spots 4123.43 cd @ HI Output, 25° Spots 8621 cd/m ² @ MED Output, 40° Spots 738.90 @ MED Output, 40° Spots	25° SPOTS 1. Select N for LED LAMPING - LINEAR/DIRECT 2. Select an output of MIN, LOW, MED, or HI for LED SPOTLIGHT - DIRECT 3. Select 25° for LED SPOTLIGHT - DIRECT 40° SPOTS 1. Select N for LED LAMPING - LINEAR/DIRECT 2. Select an output of MIN, LOW, or MED for LED SPOTLIGHT - DIRECT 3. Select 40° for LED SPOTLIGHT - DIRECT

*Advertised UGR values are averages and were calculated in AGI32 using the following method: 1) A 5.4m x 3.6m room was created and fixtures were spaced 2m apart center-to-center. Calculations were performed at 16ft. and 20ft.

ELECTRIC LIGHT QUALITY - PART 1: COLOR RENDERING QUALITY + PART 2: FLICKER WELL V2: FEATURE L07

Using light sources that have characteristics similar to daylight, including high color rendering and minimal flicker can improve comfort and well-being of users in a space and contribute to creating a healthy environment.

Part 1: Each luminaire must meet one of the following requirements (a or b) for regularly occupied spaces.

Part 2: Each luminaire must meet the IEEE 1789-2015 Standard Recommended Practice to manage flicker.

PART 1 - ENSURE COLOR RENDERING QUALITY (1PT MAX)	COMPLIANT	VALUE	HOW TO SPECIFY
a. CRI > 90	✓	CRI = 93 - 95	• Select 90 (90CRI) for LED LAMPING
b. CRI > 80 with R9 > 50	No	-	-
c. IES Rf ≥ 78, IES Rg ≥ 100, -1% ≤ IES Rcs, h1 ≤ 15%	No	-	-
PART 2 - MANAGE FLICKER (1PT MAX)	COMPLIANT	VALUE	HOW TO SPECIFY
Meets IEEE 1789-2015 Standard Recommended Practice	✓	Modulation = 1% Flicker Frequency = 120 - 2000Hz	• Select 0/10V/S, 0/10V/1%, ECOSYS1, DALI or DMX for LED DRIVER

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SPECIFYING FOR THE WELL BUILDING STANDARD™ - WELL™ (CONTINUED)

SOUND ABSORPTION - PART 1: MEET THRESHOLDS FOR REVERBERATION TIME + PART 2: IMPLEMENT SOUND REDUCING CEILINGS

WELL V2: FEATURE S04

Sound absorbing spaces help alleviate undesirable noise, reduce stress, and increase comfort, productivity, and morale.

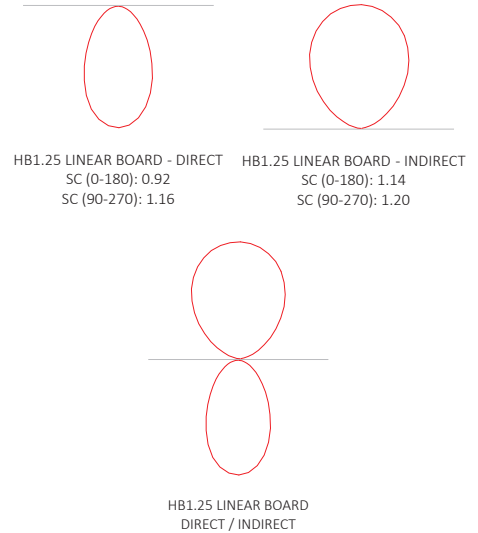
Part 1: All spaces except dwelling units meet the maximum Reverberation Time (60) thresholds in the table below.

Part 2: All spaces except dwelling units have ceiling treatment that meets the minimum Noise Reduction Coefficient NRC/ α_w values described below.

PART 1 - MEET THRESHOLDS FOR REVERBERATION TIME (1PT MAX)			
Room Type	Size	RT(60) (Seconds)	How to Specify
Conference Rooms	N/A	CRI = 93 - 95	Acoustic products in ALW's Harmonic Collection can contribute to meeting this WELL feature. Ensure to hire an acoustician to help specify products and layouts to meet the requirements of this WELL feature.
Classrooms	< 280 m³ [10,000 ft³]	≤ 0.6	
	Between 280 m³ [10,000 ft³] and 570m³ [20,000 ft³]	0.5 to 0.8	
	> 570 m³ [20,000 ft³]	0.6 to 1.0	
Lecture Halls	< 280 m³ [10,000 ft³]	≤ 0.7	
	Between 280 m³ [10,000 ft³] and 570m³ [20,000 ft³]	0.6 to 0.9	
	> 570 m³ [20,000 ft³]	0.7 to 1.3	
Music Rehearsal Spaces	< 280 m³ [10,000 ft³]	≤ 1.1	
	Between 280 m³ [10,000 ft³] and 570m³ [20,000 ft³]	1.0 to 1.4	
Fitness Facilities	< 280 m³ [10,000 ft³]	0.7 to 0.8	
	Between 280 m³ [10,000 ft³] and 570m³ [20,000 ft³]	0.8 to 1.1	
	> 570 m³ [20,000 ft³]	1.0 to 1.8	
PART 2 - IMPLEMENT SOUND REDUCING CEILINGS (1PT MAX)			
Space Type	NRC/ αw	How to Specify	
Open Workspaces Enclosed Offices Dining Spaces	0.7 for at least 75% of available ceiling area	Acoustic products in ALW's Harmonic Collection can contribute to meeting this WELL feature. Ensure to hire an acoustician to help specify products and layouts to meet the requirements of this WELL feature.	
Conference Rooms Classrooms	0.7 for at least 80% of available ceiling area		

PERFORMANCE DETAILS – DIRECT OR INDIRECT LINEAR LAMPING (PER FOOT)

OUTPUT	DELIVERED LUMENS (LM/FT) <i>direct</i> <i>indirect</i>	WATTS (W/FT)	EFFICACY (LM/W)	CRI OPTIONS	CCT OPTIONS
MIN ²¹	200 250	2.25	Up to 89 lm/W (<i>direct</i>) 117 lm/W (<i>indirect</i>)	80 90	2700K 3000K 3500K 4000K
LOW ²¹	300 400	3.375			
MED ²¹	400 525	4.5			
HI ²¹	600 800	6.75			
MAX	800 1050	9.0			
RGB ²¹	Color-Changing RGB	5	N/A	N/A	N/A

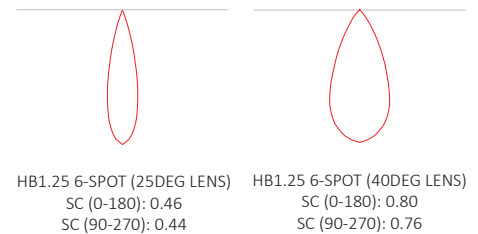


²¹Performance calculations are extrapolated estimates based on actual performance data of MAX output at 80 CRI and 4000K and EXT lens.

²²DMX driver recommended; controller not included.

PERFORMANCE DETAILS – SPOTLIGHT LAMPING (PER FOOT)

OUTPUT	DELIVERED LUMENS (LM/FT)	WATTS (W/FT)	EFFICACY (LM/W)	CRI OPTIONS	CCT OPTIONS
MIN	500	5.6	Up to 83 lm/W	80 90	2700K 3000K 3500K 4000K
LOW	700	8.4			
MED	1000	12			
HI	1400	18.4			





HB1.25 VOLTAGE DROP CHART FOR REMOTE DRIVERS — WHITE LED (29VDC)

For best performance, ensure proper wire gauge is installed between the remote LED driver and canopy that is dropping power to your fixture. *This chart only applies to HB1.25 White LEDs at 24VDC. Do not use this chart to calculate voltage drop for other fixtures.*

WIRE GAUGE	20W 0.83A	30W 1.25A	40W 1.67A	50W 2.08A	60W 2.50A	70W 2.92A	80W 3.33A	90W 3.75A	100W 4.17A
18 AWG	90 ft.	58 ft.	41 ft.	31 ft.	25 ft.	20 ft.	16 ft.	14 ft.	11 ft.
16 AWG	150 ft.	97 ft.	70 ft.	55 ft.	44 ft.	37 ft.	31 ft.	27 ft.	23 ft.
14 AWG	242 ft.	158 ft.	117 ft.	92 ft.	75 ft.	63 ft.	54 ft.	48 ft.	42 ft.
12 AWG	390 ft.	257 ft.	190 ft.	151 ft.	124 ft.	105 ft.	91 ft.	80 ft.	71 ft.
10 AWG	623 ft.	413 ft.	307 ft.	245 ft.	202 ft.	172 ft.	150 ft.	132 ft.	118 ft.

HB1.25 VOLTAGE DROP CHART FOR REMOTE DRIVERS — RGB LED (24VDC)

For best performance, ensure proper wire gauge is installed between the remote LED driver and canopy that is dropping power to your fixture. *This chart only applies to HB1.25 RGB LEDs at 24VDC. Do not use this chart to calculate voltage drop for other fixtures.*

WIRE GAUGE	20W 0.83A	30W 1.25A	40W 1.67A	50W 2.08A	60W 2.50A	70W 2.92A	80W 3.33A	90W 3.75A	100W 4.17A
18 AWG	59 ft.	37 ft.	26 ft.	19 ft.	14 ft.	11 ft.	8 ft.	7 ft.	5 ft.
16 AWG	99 ft.	63 ft.	46 ft.	35 ft.	28 ft.	22 ft.	18 ft.	15 ft.	13 ft.
14 AWG	163 ft.	106 ft.	77 ft.	60 ft.	49 ft.	40 ft.	34 ft.	30 ft.	26 ft.
12 AWG	264 ft.	173 ft.	128 ft.	100 ft.	82 ft.	69 ft.	60 ft.	52 ft.	46 ft.
10 AWG	424 ft.	280 ft.	208 ft.	165 ft.	136 ft.	115 ft.	100 ft.	88 ft.	78 ft.



ACOUSTIC COLORS & INFORMATION

The Harmonic Collection features 10 acoustic material colors comprised of ~0.5" (12mm) PET polyester fibers, specially designed for premium sound absorption. ALW's PET acoustics as a 2D absorber have a NRC (Noise Reduction Coefficient) of 85%. Each panel is precision-cut to size using our CNC-cutting process, enabling a wealth of design options from beveled edges to custom cutouts. All panels conform to ASTM E84 Class A and EN13501-1 Class B fire ratings.



COMPANION ACOUSTIC COLORS & RAL FINISHES

The chart below outlines suggested RAL finishes to complement the acoustic colors above. With exception to ALW Satin Black and Satin White these RAL suggestions are not standard paint finish offerings. See next page for ALW's full paint finish catalog.

ACOUSTIC COLOR	COMPANION RAL FINISHES	ACOUSTIC COLOR	COMPANION RAL FINISHES
Crystal White	ALW Satin Black (SB) ALW Satin White (SW)	Ivory White	ALW Satin Black (SB) ALW Satin White (SW)
Marble White	RAL 7024 - Graphite Grey RAL 7046 - Telegrey 2 ALW Satin Black (SB) ALW Satin White (SW)	Aloe Green	RAL 6025 - Fern Green (slightly darker shade than acoustic) RAL 7013 - Brown Grey ALW Satin Black (SB) ALW Satin White (SW)
Heather Gray	RAL 7024 - Graphite Grey RAL 7046 - Telegrey 2 ALW Satin Black (SB) ALW Satin White (SW)	Titan Orange	RAL 2011 - Deep Orange RAL 5003 - Sapphire Blue RAL 5008 - Grey Blue RAL 8011 - Nut Brow RAL 9001 - Cream ALW Satin Black (SB) ALW Satin White (SW)
Charcoal Gray	RAL 7021 - Black Grey RAL 7024 - Graphite Grey ALW Satin Black (SB) ALW Satin White (SW)	Scarlet Red	RAL 3031 - Orient Red RAL 7047 - Telegrey 4 RAL 9001 - Cream ALW Satin Black (SB) ALW Satin White (SW)
Jet Black	ALW Satin Black (SB) ALW Satin White (SW)	Midnight Blue	RAL 5002 - Ultramarine Blue RAL 2011 - Deep Orange RAL 4010 - Magenta RAL 7047 - Telegrey 4 RAL 9001 - Cream ALW Satin Black (SB) ALW Satin White (SW)



STANDARD FINISHES

Standard finishes are available at no additional charge.

STANDARD FINISHES

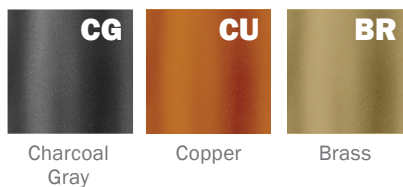


PREMIUM FINISHES

BASIC POWDER COAT



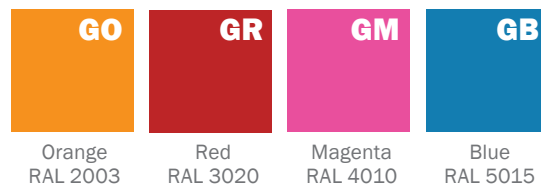
METALLIC POWDER COAT



SATIN ANODIZED EFFECT POWDER COAT



GLOSS POWDER COAT (80-95% GLOSS)



Contact ALW Quotes for sample paint finish swatches.

SPECIAL ORDER FINISHES*



RAL CLASSIC COLORS (80-95% GLOSS): RAL_ _ _ _

Most RAL Classic Colors are available for a minimum setup fee. On your specification submittal choose your RAL color by entering the 4-digit RAL code (Ex: RAL 3003). See www.alw-inc.com/resources/finishes



CUSTOM COLOR MATCH: CCM_ _ _ _

Custom powder coat color matching is available for a premium setup fee. Consult [ALW](http://www.alw-inc.com) for additional information.

*An individual setup fee will apply to each unique Special Order Finish per purchase order.
(ex: RAL 5023 and RAL 2008 are specified for multiple line items on a purchase order. 2x setup fees will apply)

*Printed or on-screen colors are only approximations - consult actual Color Chip Set before specifying



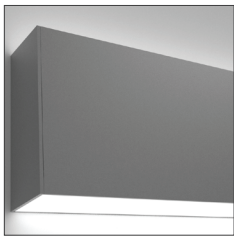
ADDITIONAL OPTIONS & SPECIFICATIONS

LED PERFORMANCE

For standard lampings: $L_{70} > 54,000$ hours.
Luminous flux +/- 5%.

LENS

Extruded, twin-layered, high-impact acrylic. EXT is white and extra diffuse with minimal-to-no source visibility.



EXT — EXTRA DIFFUSE

HOUSING

100% recyclable, extruded architectural grade 6061 aluminum with a 0.08" minimum wall thickness.

SAFETY & REGULATORY

REMOTE DRIVER CERTIFICATIONS

ETL Listed (U.S. & Canada). Suitable for dry or damp locations.
Conforms to UL std. 2108, Low Voltage Luminaires / Low Voltage Lighting Systems.
Certified to CSA std. C22.2#9.0:1996 Ed. 1+S1.

INTEGRATED DRIVER CERTIFICATIONS

ETL Listed (U.S. & Canada). Suitable for dry or damp locations.
Conforms to UL std. 1598, Luminaires.
Certified to CSA std. C22.2#250.0:2008 Ed. 3+G1;G2.

ACOUSTICS

Material: 0.5" (12mm) PET polyester fibers. Acoustic sound absorbers are 100% recyclable at end of life use.
NRC Rating: Our acoustics as a 2D absorber have a Noise Reduction Coefficient of 85%. Full test reports of common layouts for 3D absorbers including NRC and Sabin values will be available shortly.
Fire Rating: Conforms to ASTM E84 Class A. Also conforms to EN13501-1 Class B.

OPERATING TEMPERATURE

Luminaire should be installed and operated ONLY in dry or damp environments where the ambient temperature ranges from -4 °F to 122 °F (-20 °C to 50 °C). Luminaire operation in environments outside the listed temperature range voids the warranty AND may damage the product or adversely impact lamp life, lumen output and color consistency.

WEIGHT

Approximately 2.2 lbs. per linear foot. Weight may vary depending on mounting and additional options selected.

POWER CABLES

Power cables come standard in a transparent sheathing to match steel aircraft suspension cables. Please contact customer support if custom cables are required for your application. Power cables cannot be swapped in the field as it will void the ETL Safety Listing and Product Warranty.



CONTROLS, SENSORS, & LED DRIVER

ALW lighting fixtures are intended for use with a wide range of sensors, lighting controls, LED drivers, and building management systems. Our component portfolio is continually expanding to adopt to the latest technologies and specification needs. We currently support integration with Lutron, Enlighted, EldoLED, nLight, Osram, Philips, and more. If there's a component or system needed that you don't see on the spec sheet please contact ALW customer support today so we can review your requirements.

WARRANTY

Limited 11-year warranty. Details: alw-inc.com/warranty