<u>CUSTOM QUOTE EXAMPLES</u>

Large Dedicated Theater

8

Distributed Audio



Large Dedicated Theater





ABCAV Theater X Quotes & Speaker Layouts

Design V1.0 - 7/20/2020

Prepared by Ron Rouse

Quotes



	The VALUE System 11.4.8 Dolby ATMOS Consumer Theater	The GOOD System 11.4.8 Dolby ATMOS Consumer Theater	The BETTER System 17.4.10 Dolby ATMOS Digital Cinema Theater	The BEST System 17.4.10 Dolby ATMOS Digital Cinema Theater
Speaker Models	 Front LCR Channels (3) Sage Cinema Line 4 Line Source Speakers Surround & Overhead Channels (8) Insight L8i Line Source for Side CH's (4) Sage Point 3 Point Source for Rear CH's (8) Sage ICS7a Point Source for Overhead CH's Subwoofers (2) STS RTL Subwoofers (Front) (2) STS RTL Subwoofers (Rear) 	 Front LCR Channels (3) Sage Cinema Line 5 Line Source Speakers Surround & Overhead Channels (8) Sage Cinema Line 2 Line Source for Side CH's (2) Sage-C Horizontal Line Source for Rear CH's (8) Sage ICS7a Point Source for Overhead CH's Subwoofers (4) STS RTL Subwoofers (Front) (2) STS RTL Subwoofers (Rear) 	 Front LCR Channels (3) Sage Cinema Line 5 Line Source Speakers Surround & Overhead Channels (10) Sage Cinema Line 3 Line Source for Side CH's (4) Sage-C Horizontal Line Source for Rear CH's (10) Sage Point 3 Point Source for Overhead CH's Subwoofers (4) STS RTL Subwoofers (Front) (2) STS RTL Subwoofers (Rear) 	 Front LCR Channels (6) Wisdom Series LS3i Stacked Line Source Speakers Surround & Overhead Channels (10) Wisdom Series LS3i Line Source for Side CH's (4) Sage-C Horizontal Line Source for Rear CH's (10) Sage Point 3 Point Source for Overhead CH's Subwoofers (4) STS RTL Subwoofers (Front) (4) STS RTL Subwoofers (Rear)
Electronics & Cables	 (12) SA-3 Amplifiers (1) SC-2 System Controller with Dirac Room EQ (1) SC-3 System Controller with Dirac Room EQ (1) WWK-BB2 custom wire kit for SC-2 (1) WWK-BB3 custom wire kit for SC-3 	 (16) SA-3 Amplifiers (1) SC-2 System Controller with Dirac Room EQ (1) SC-3 System Controller with Dirac Room EQ (1) WWK-BB2 custom wire kit for SC-2 (1) WWK-BB3 custom wire kit for SC-3 	 (20) SA-3 Amplifiers (2) SC-3 System Controller with Dirac Room EQ (2) WWK-BB3 custom wire kit for SC-3 	 (1) SA-2 Amplifier (20) SA-3 Amplifiers (2) SC-3 System Controller with Dirac Room EQ (2) WWK-BB3 custom wire kit for SC-3
Services	• (1) Custom Factory System Calibration & Room Commissioning	• (1) Custom Factory System Calibration & Room Commissioning	• (1) Custom Factory System Calibration & Room Commissioning	• (1) Custom Factory System Calibration & Room Commissioning
System Total (MSRP)	\$296,800	\$399,000	\$559,400	\$841,400
System Advantages & Benefits	 Great Wisdom Audio Signature Sound Clarity and details using Planar Magnetic Drivers (PMD) Planar Magnetic Drivers cover 6 Octaves for LCR, 6 Octaves for Sides, 5 Octaves for Rear and Overhead Channels Articulated bass using Regenerative Transmission Line Subwoofer Technology (RTL) Wisdom Audio SA Amplifiers for speaker matching and the best in dynamic output with the highest level of audiophile clarity 	 All the VALUE System attributes plus The GOOD system upgrades the LCR Channels to using the Line 5's for added vertical line source coverage The GOOD system upgrades all Side Surround Channels to using the Sage Cinema Series Line 2's. This will provide improved clarity and dynamics. The GOOD system upgrades the Rear Channels Channels to the Sages Cinema Horizontal Line Source for then ultimate in dynamics and SPL coverage over distance The GOOD system adds an additional two STS RTL Subwoofers in the front of the room for additional low frequency dynamics needed for this size of 	 All the GOOD System attributes plus The BETTER system upgrades all Surround Channels to using the Line 3's for additional vertical coverage, dynamics and system clarity The BETTER system upgrades the Overhead Channels to the Sages Cinema Series Point 3 or improved output and clarity The BETTER System adds additional Side and Rear Channels to meet the Dolby Digital Cinema Specification 	 All the BETTER System attributes plus LCR & Side Channel Planar Magnetic Drivers now cover 8 Octaves by upgrading to the Wisdom Series LS3i's. This will also provide the absolute BEST playback clarity and dynamics The BEST system add an additional pair of STS RTL Subwoofers to the rear of the room providing the most dynamic and stunning low frequency available anywhere

room

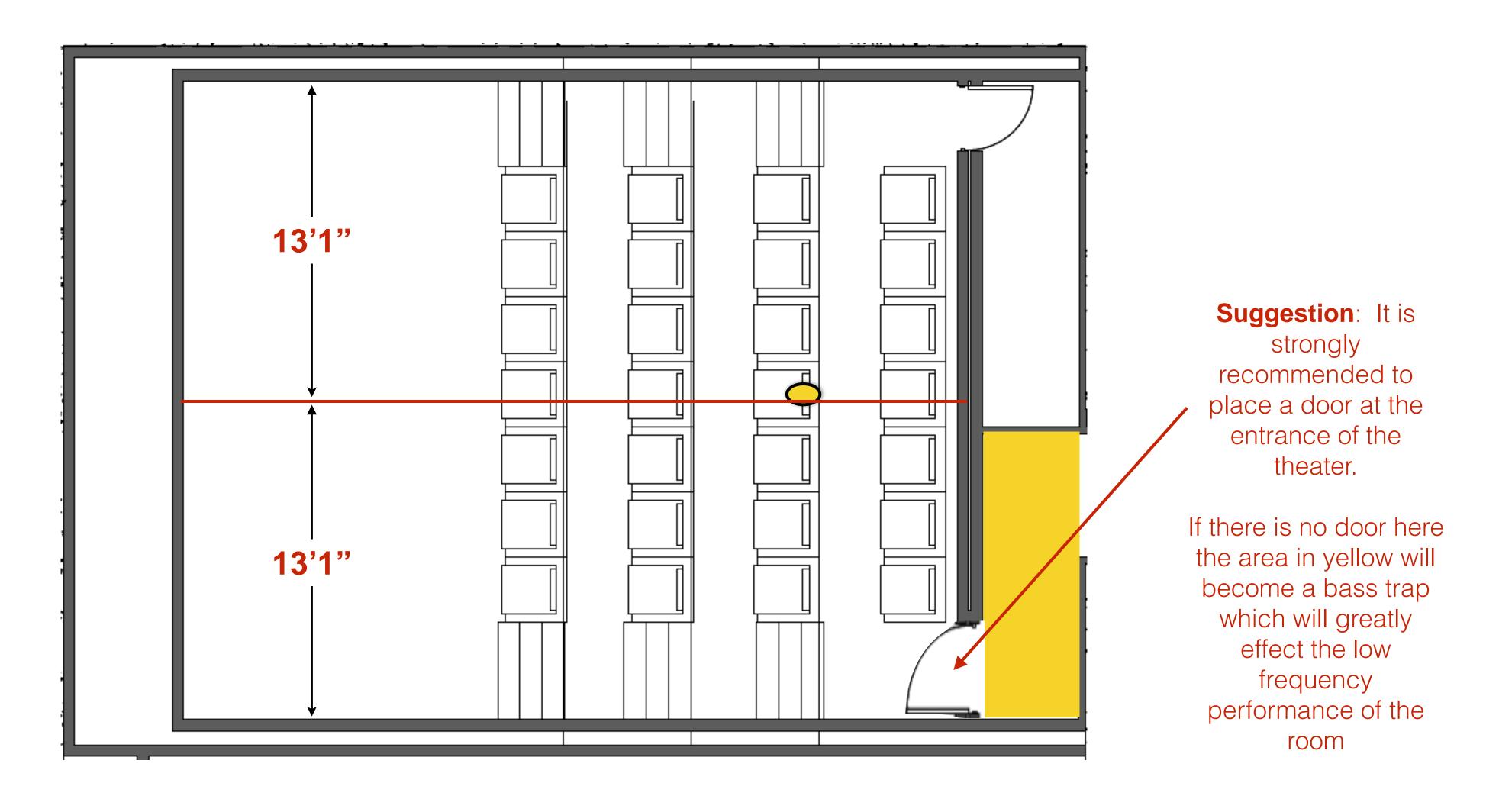




The following Elevation and Overhead Speaker Layouts are for the "Theater X"







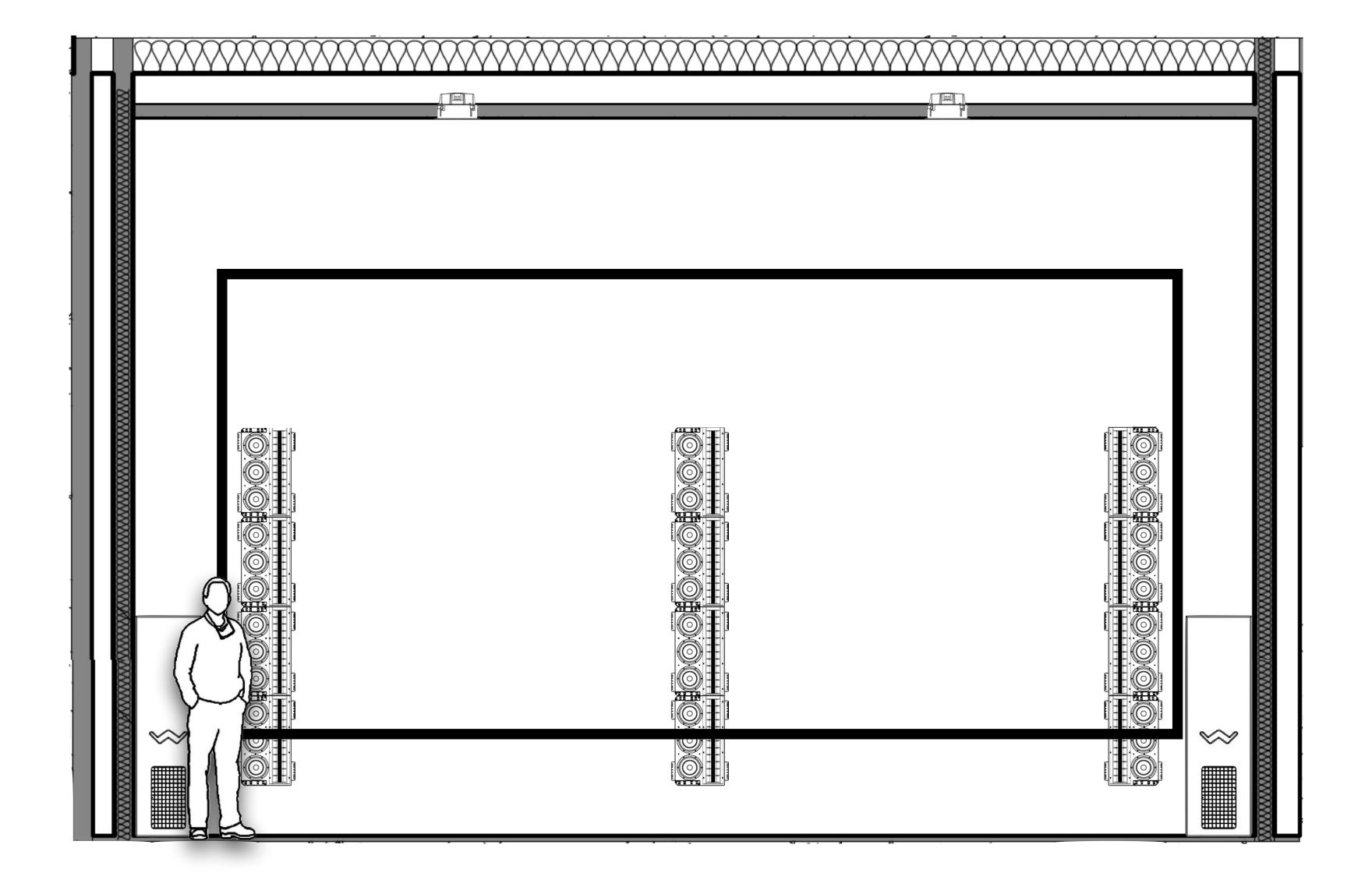
Room Notes: The Center Seat is offset right of center point in the room

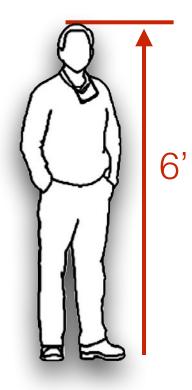


Front Wall Elevations



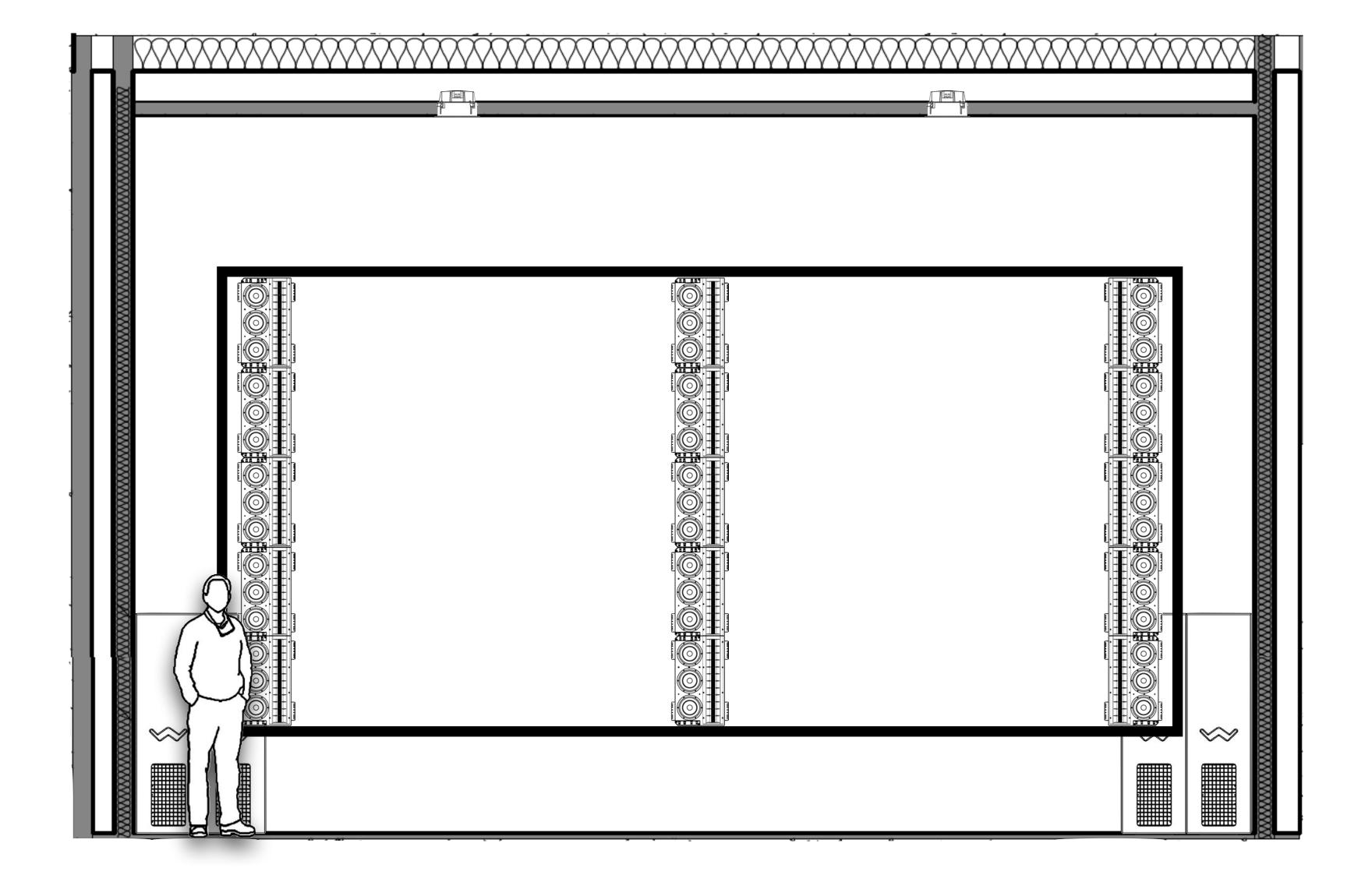


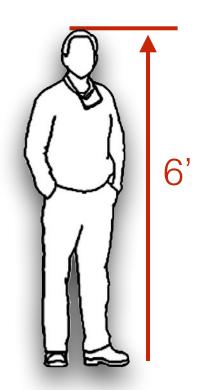






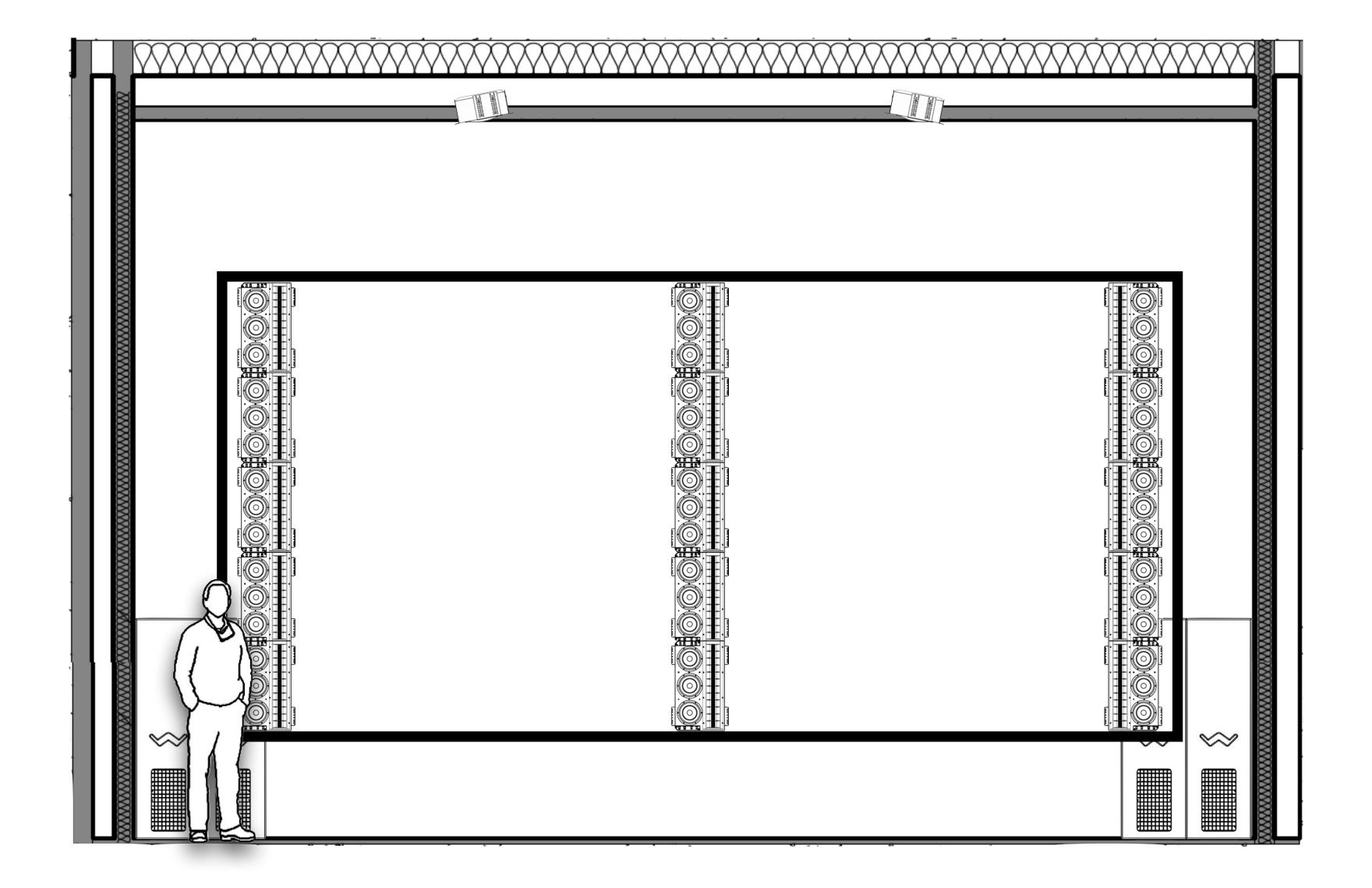


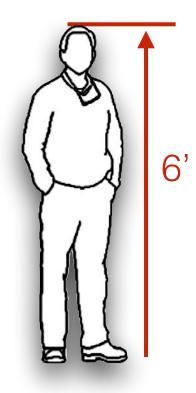






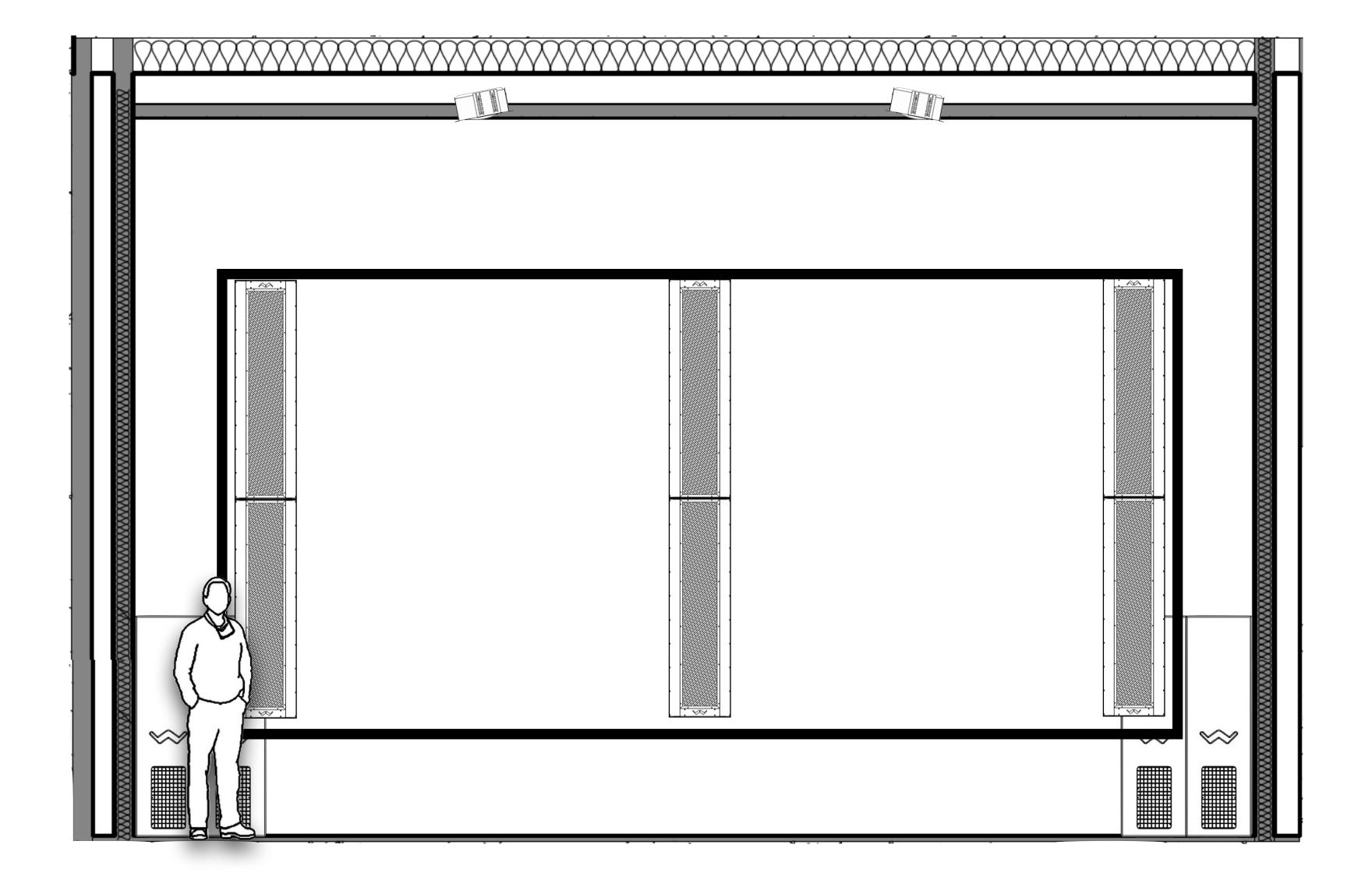


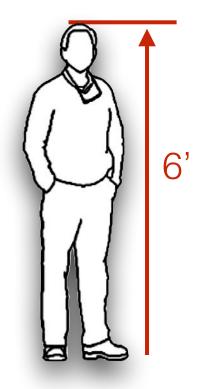














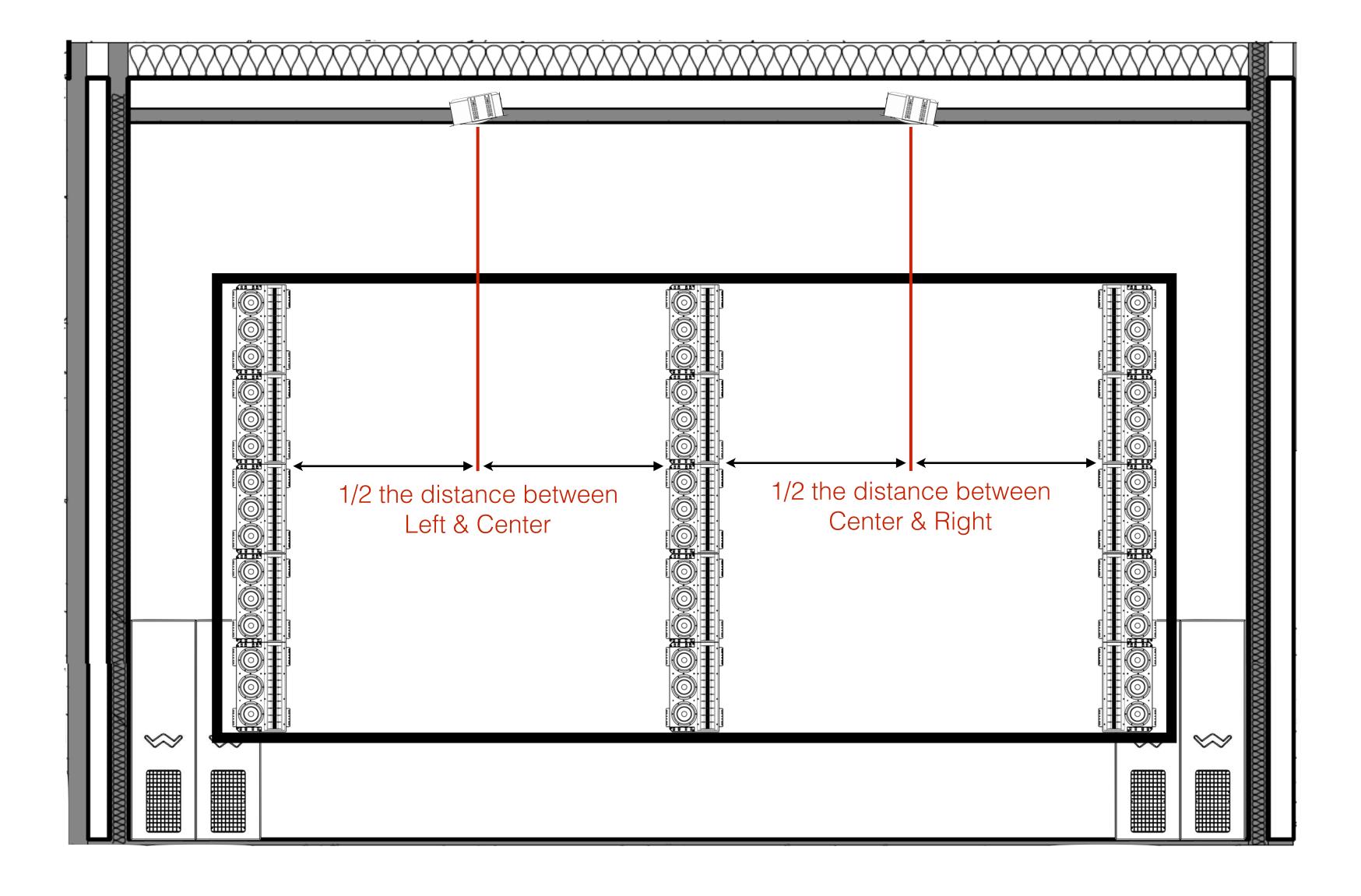
Screen Distance & Atmos Layout Alignment

Dealer Logo WISDOM® **60° 60° 60°**

Front Wall Speaker Layout for Dolby Consumer ATMOS







Front Wall Speaker Layout for Dolby Digital Cinema ATMOS



Woven Screens:

4" is the very Min for Woven, 12" is the best distance, and increasing the distance will equate to a better result

Microperf Screens:

8" is the very min for Microperf, 15" is the best distance, and increasing the distance will equate to a better result

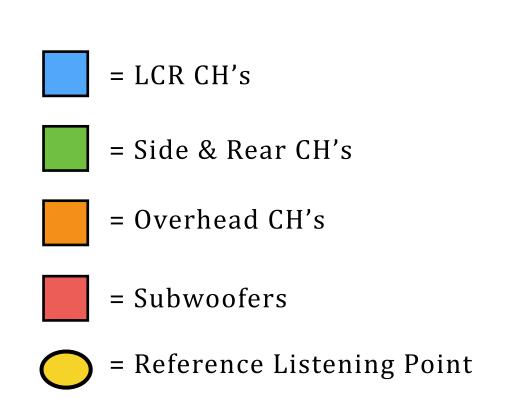
How far back to place speakers from an acoustically transparent screen

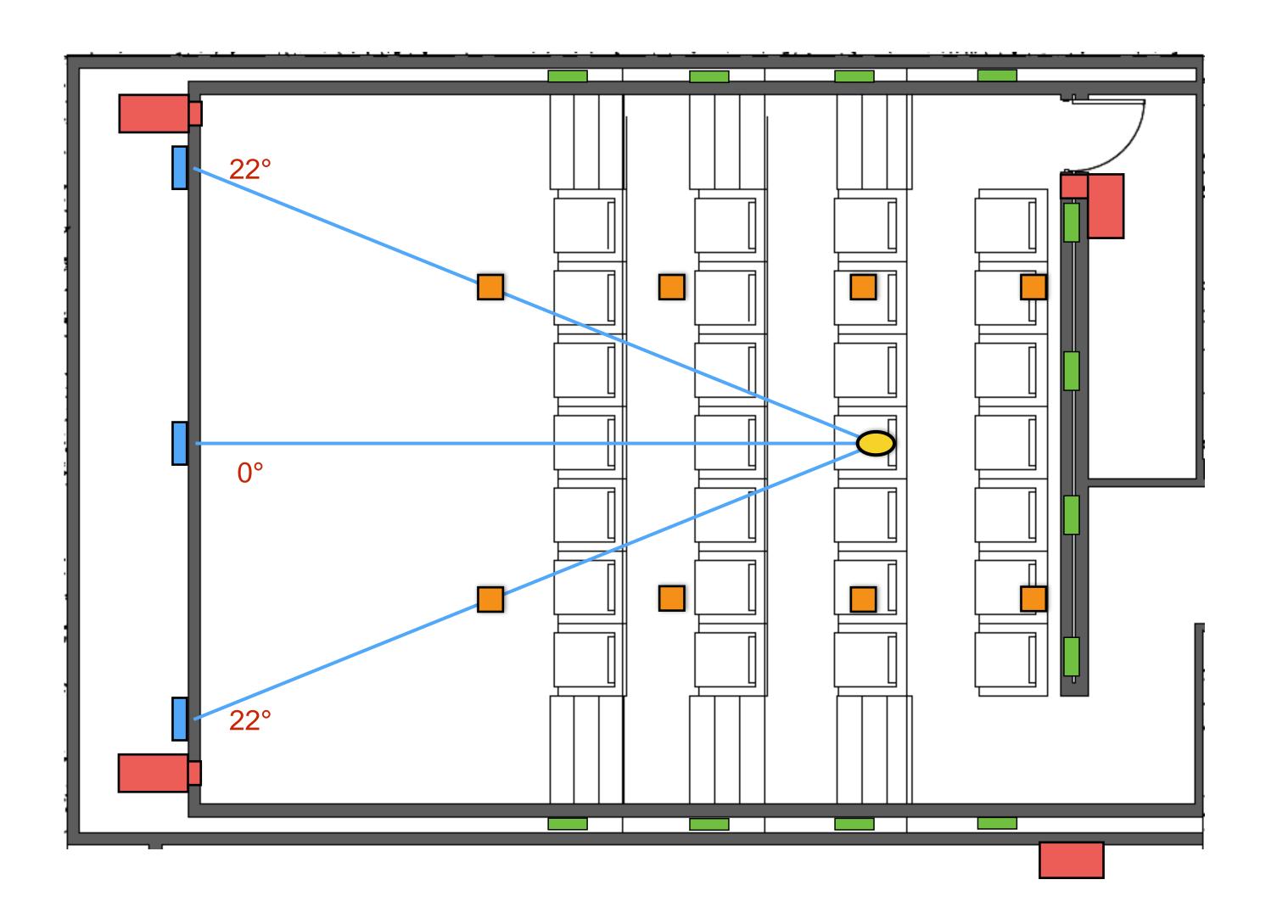


Overhead Speaker Layouts





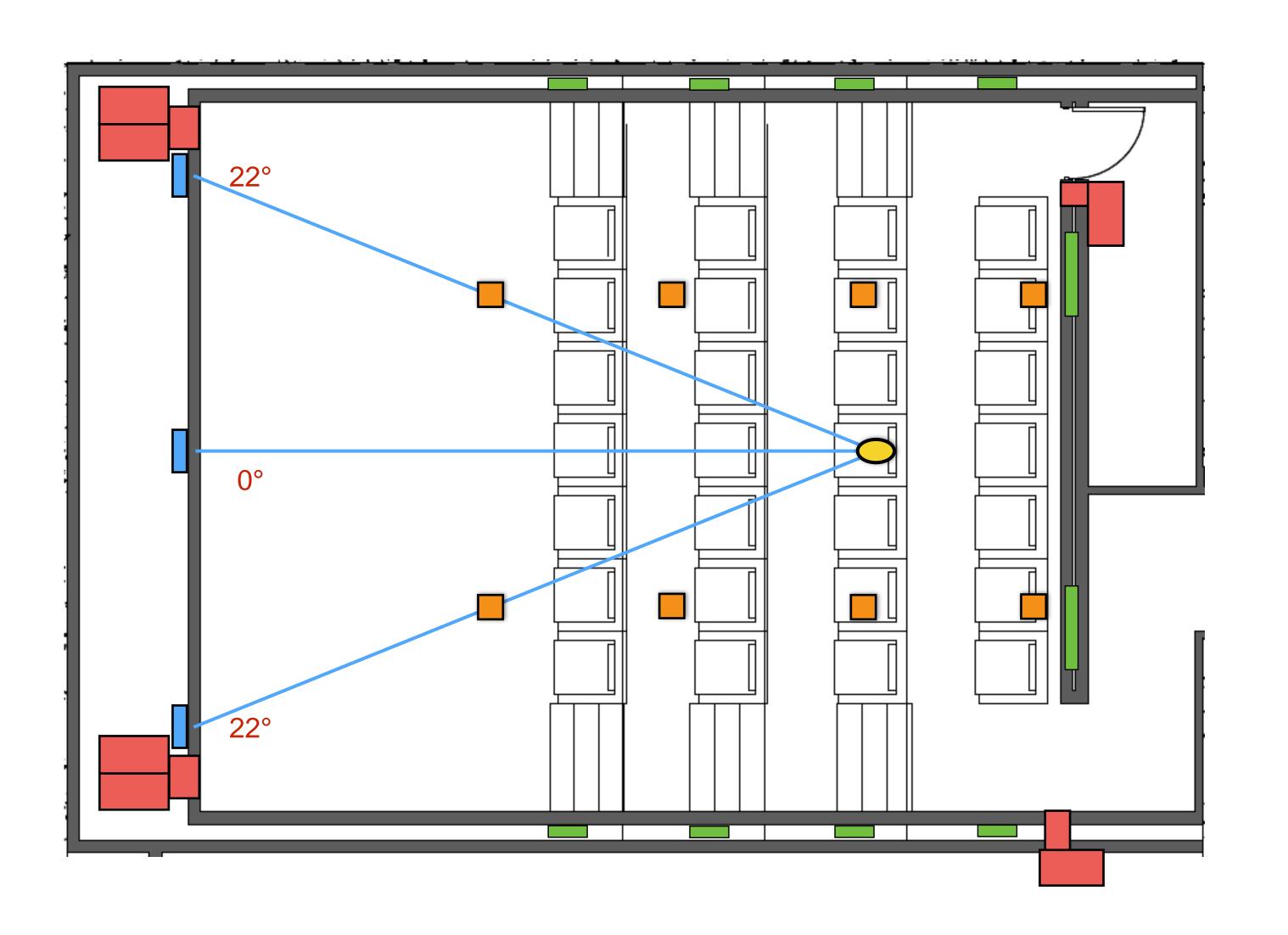






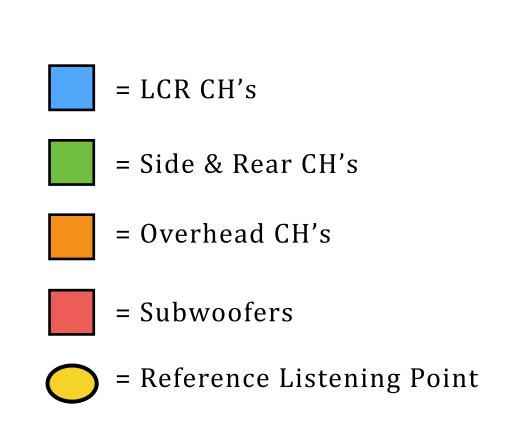


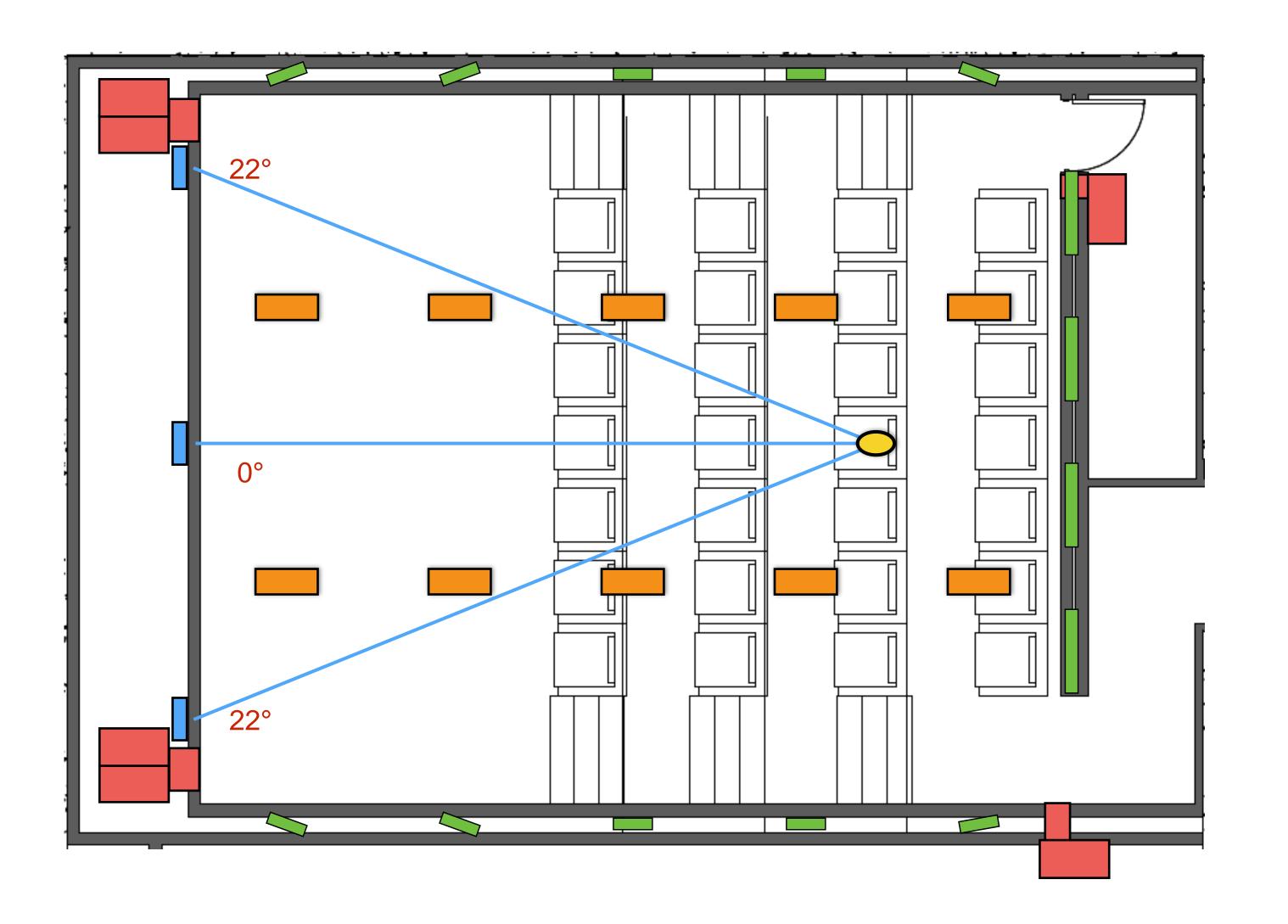








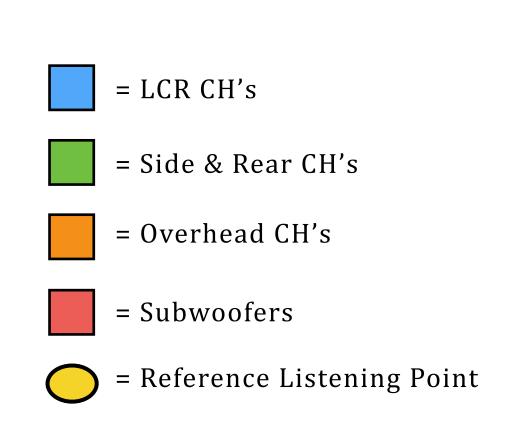


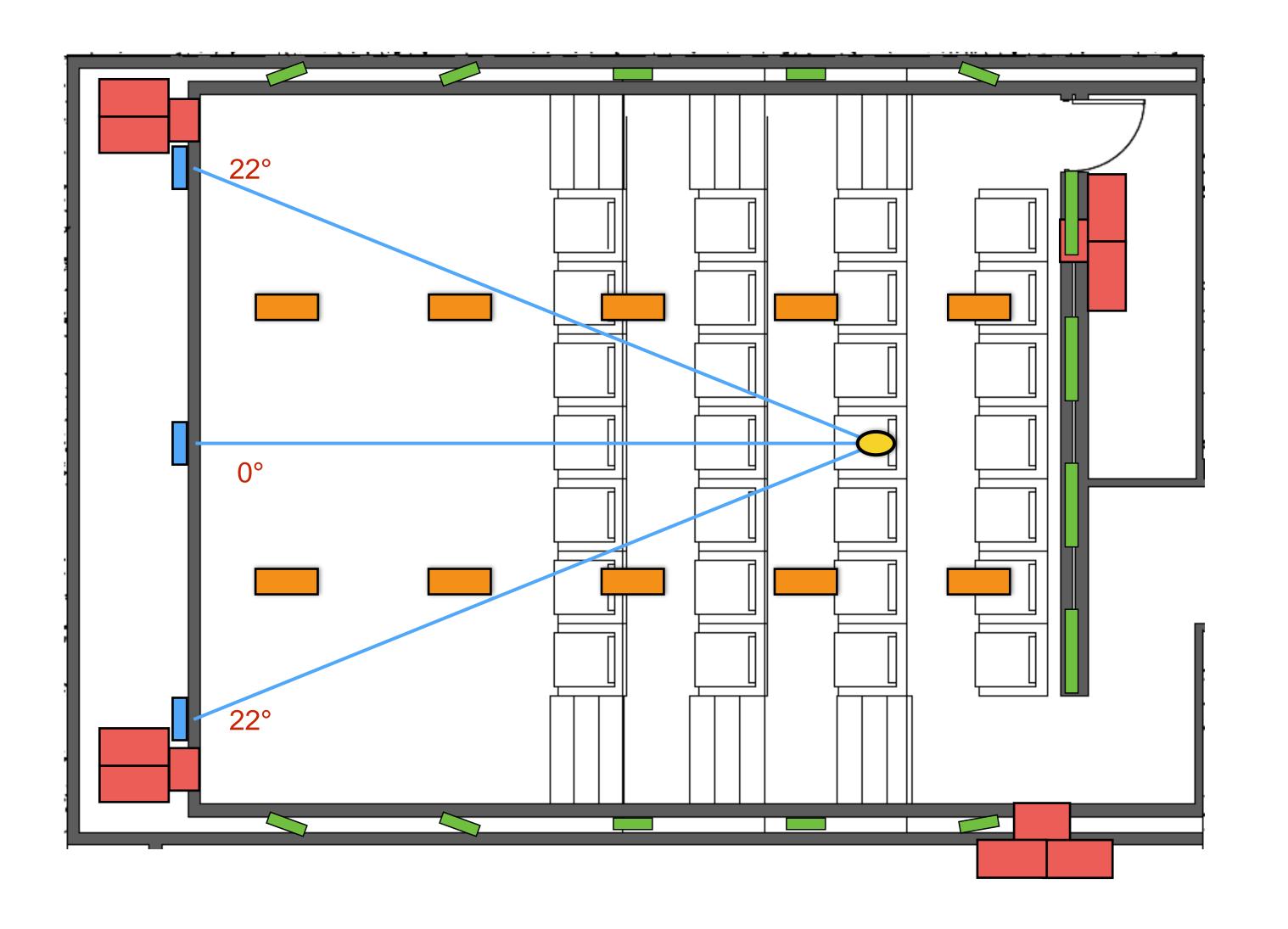


Overhead Speaker Layout - BETTER







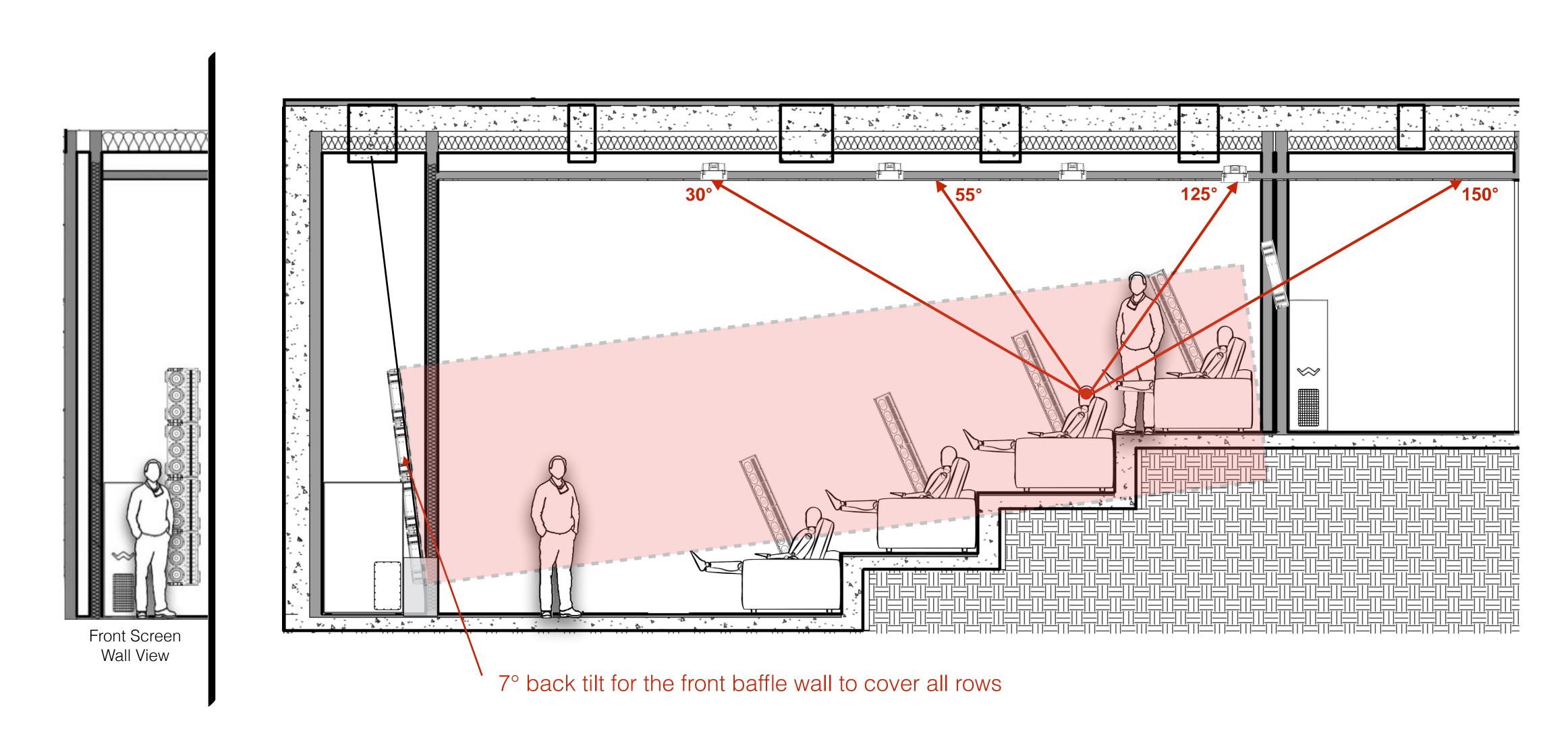


Overhead Speaker Layout - BEST



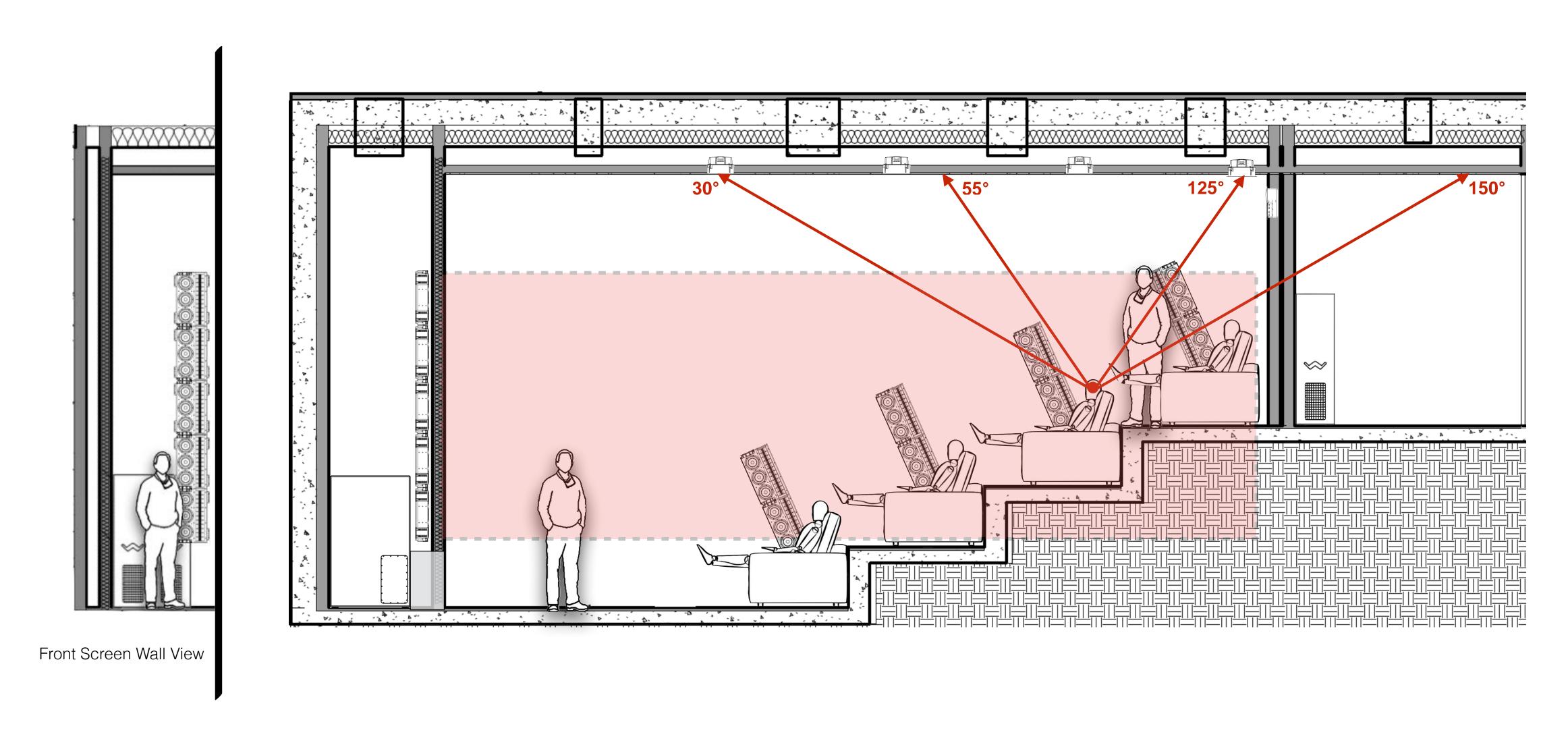
Side & Rear Wall Elevations





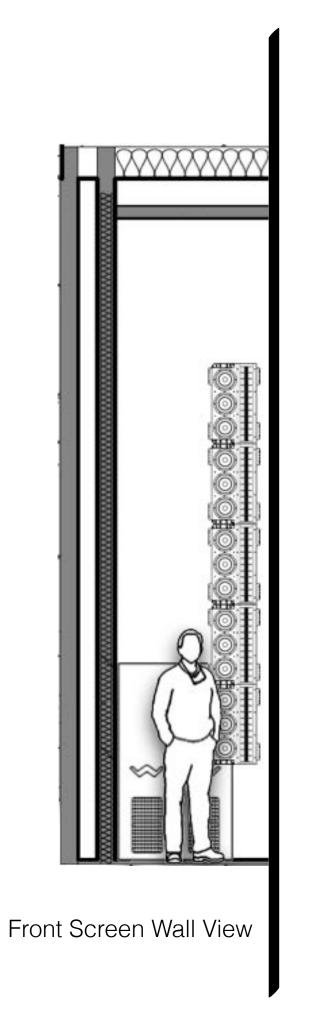
Right Side Wall Elevation Speaker Layout - VALUE

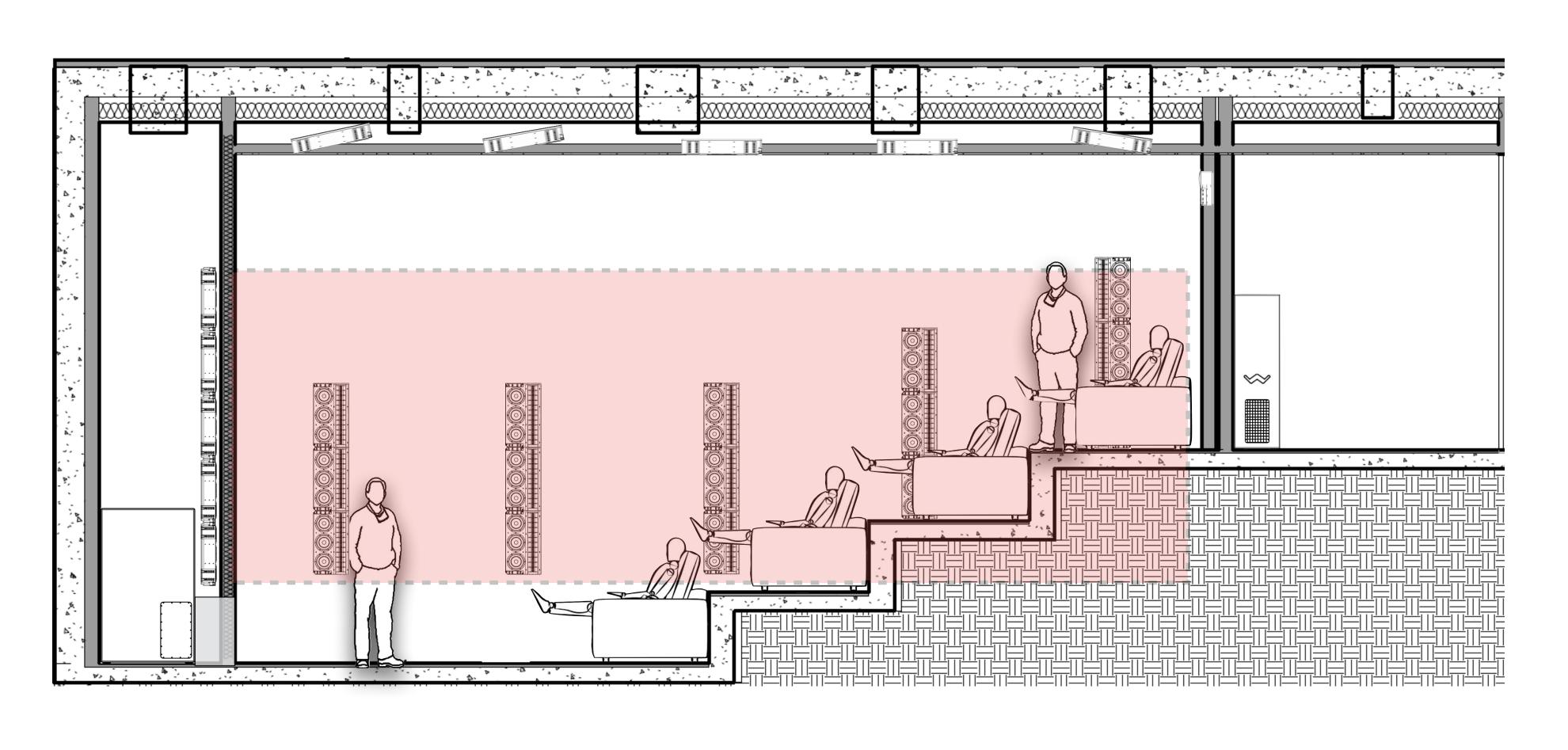




Right Side Wall Elevation Speaker Layout - GOOD

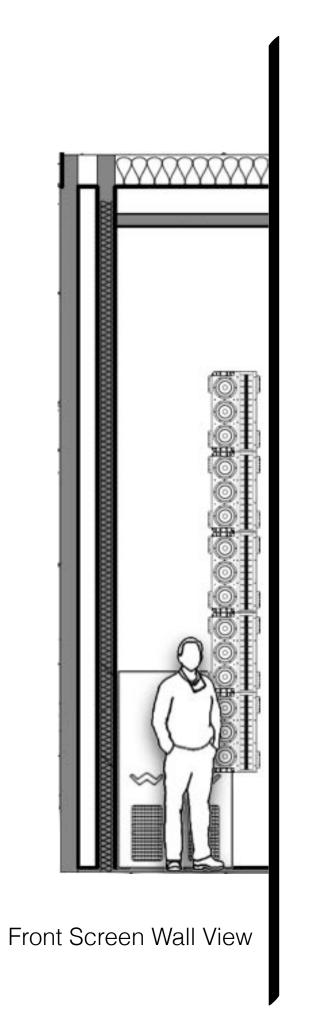


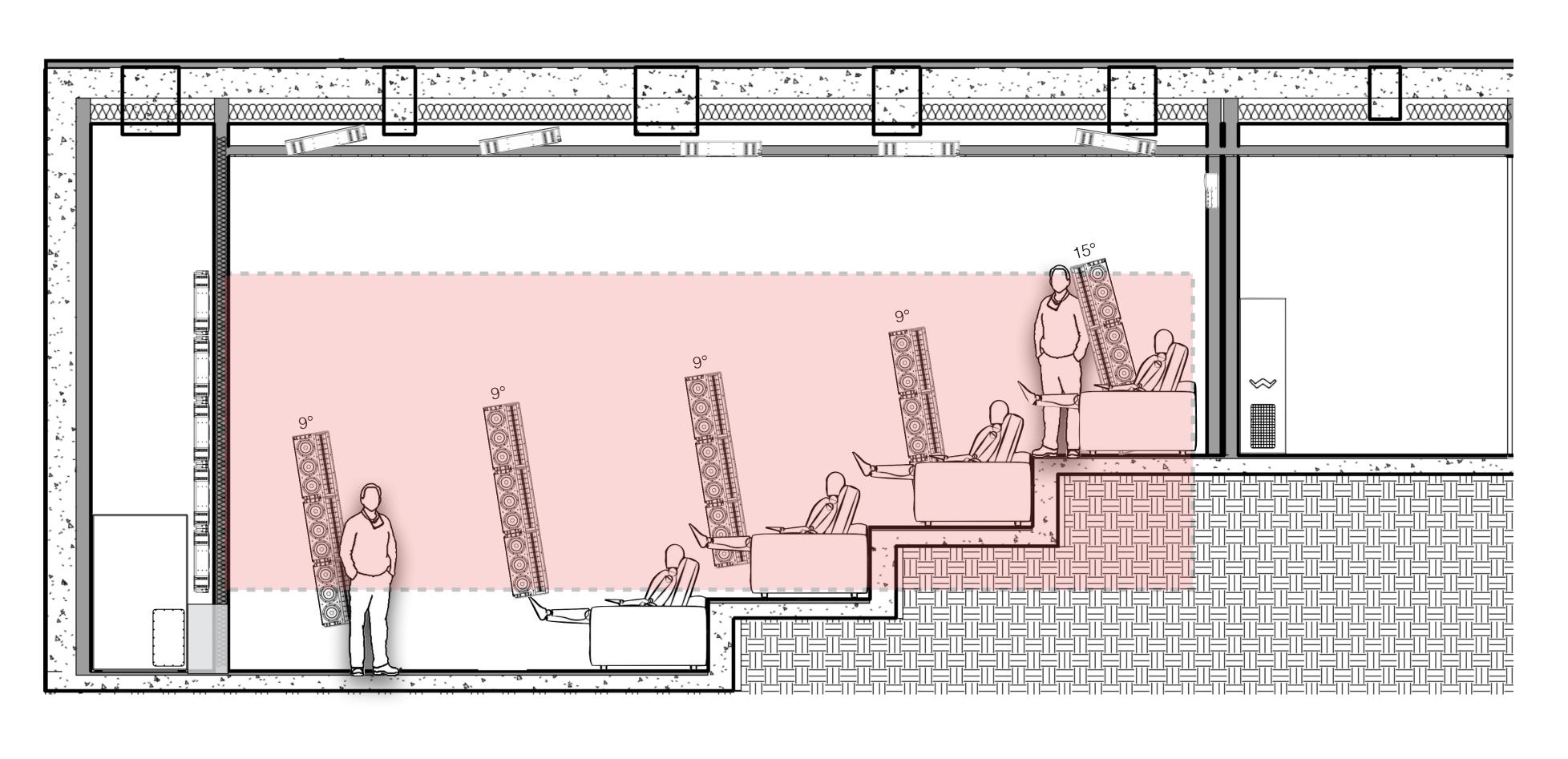




Right Side Wall Elevation Speaker Layout - BETTER Side Channel Layout Option #1

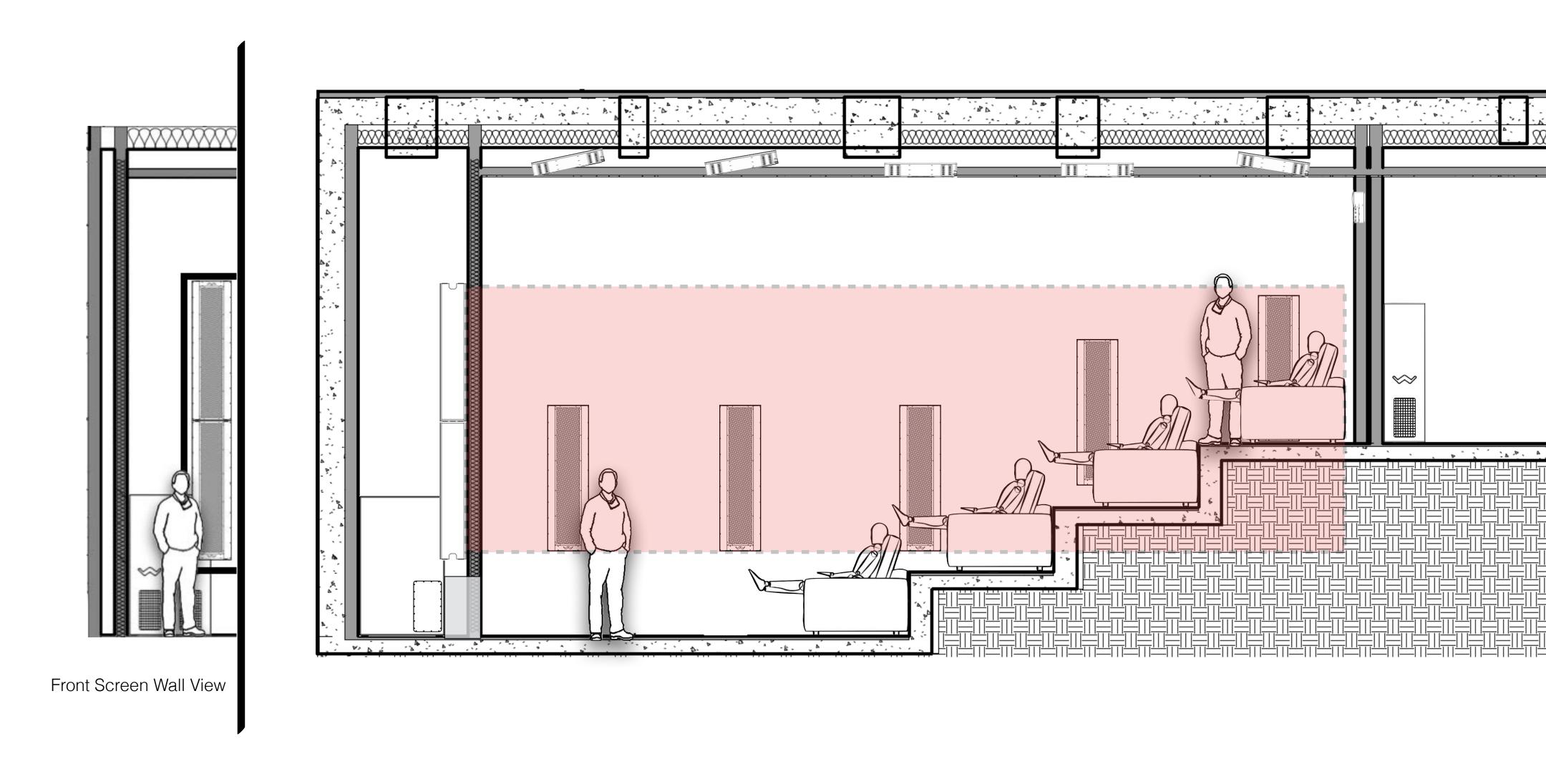






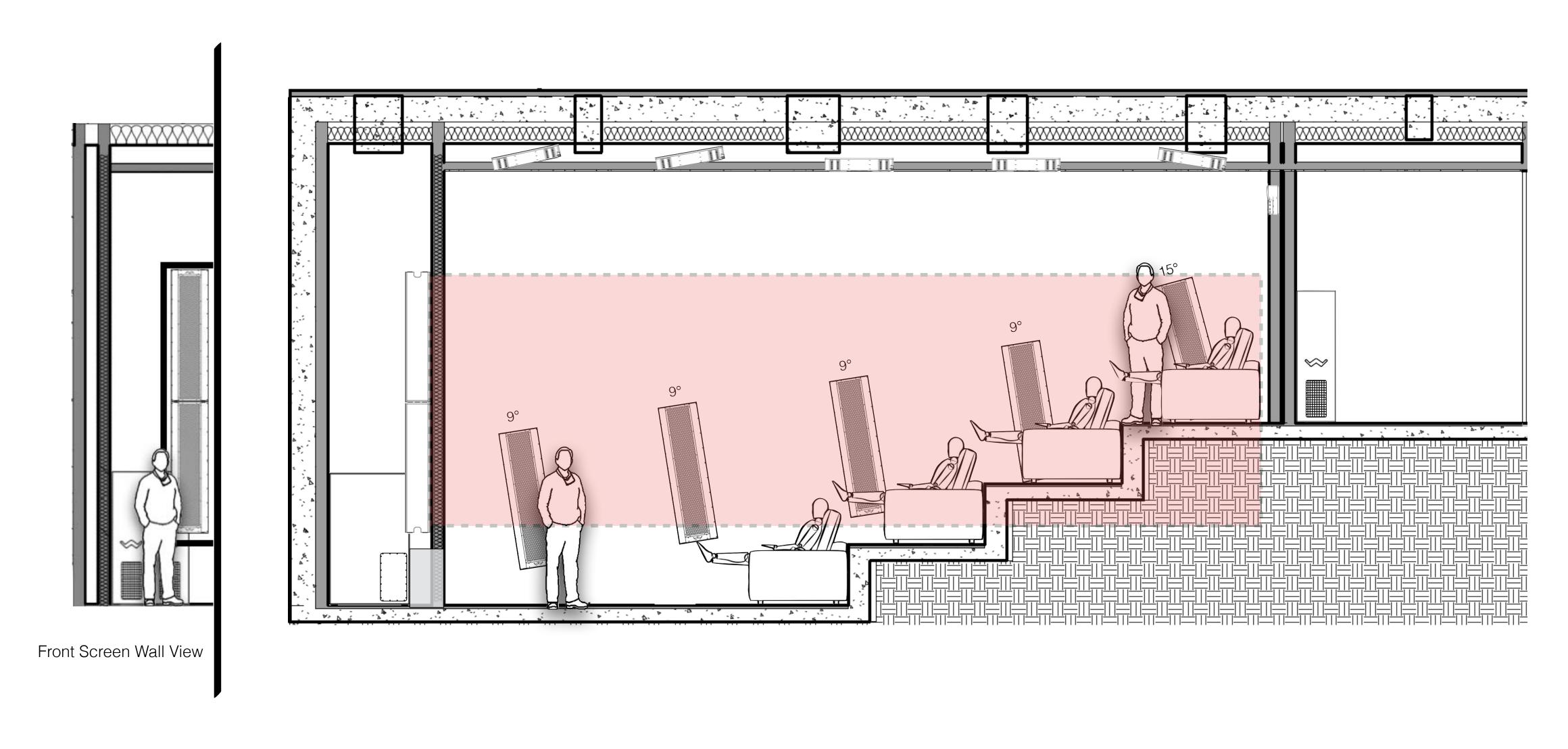
Right Side Wall Elevation Speaker Layout - BETTER Side Channel Layout Option #2





Right Side Wall Elevation Speaker Layout - BEST Side Channel Layout Option #1

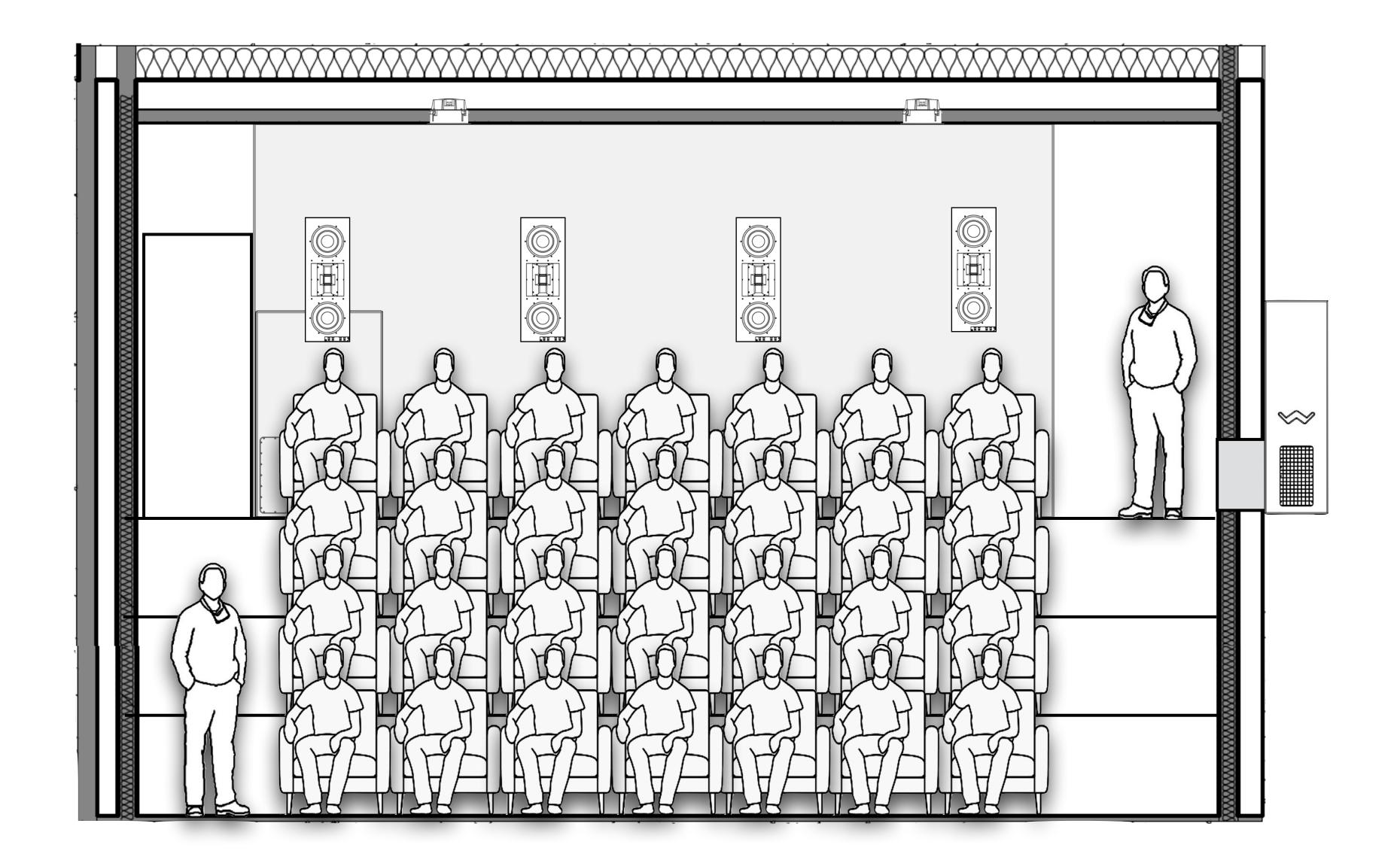




Right Side Wall Elevation Speaker Layout - BEST Side Channel Layout Option #2

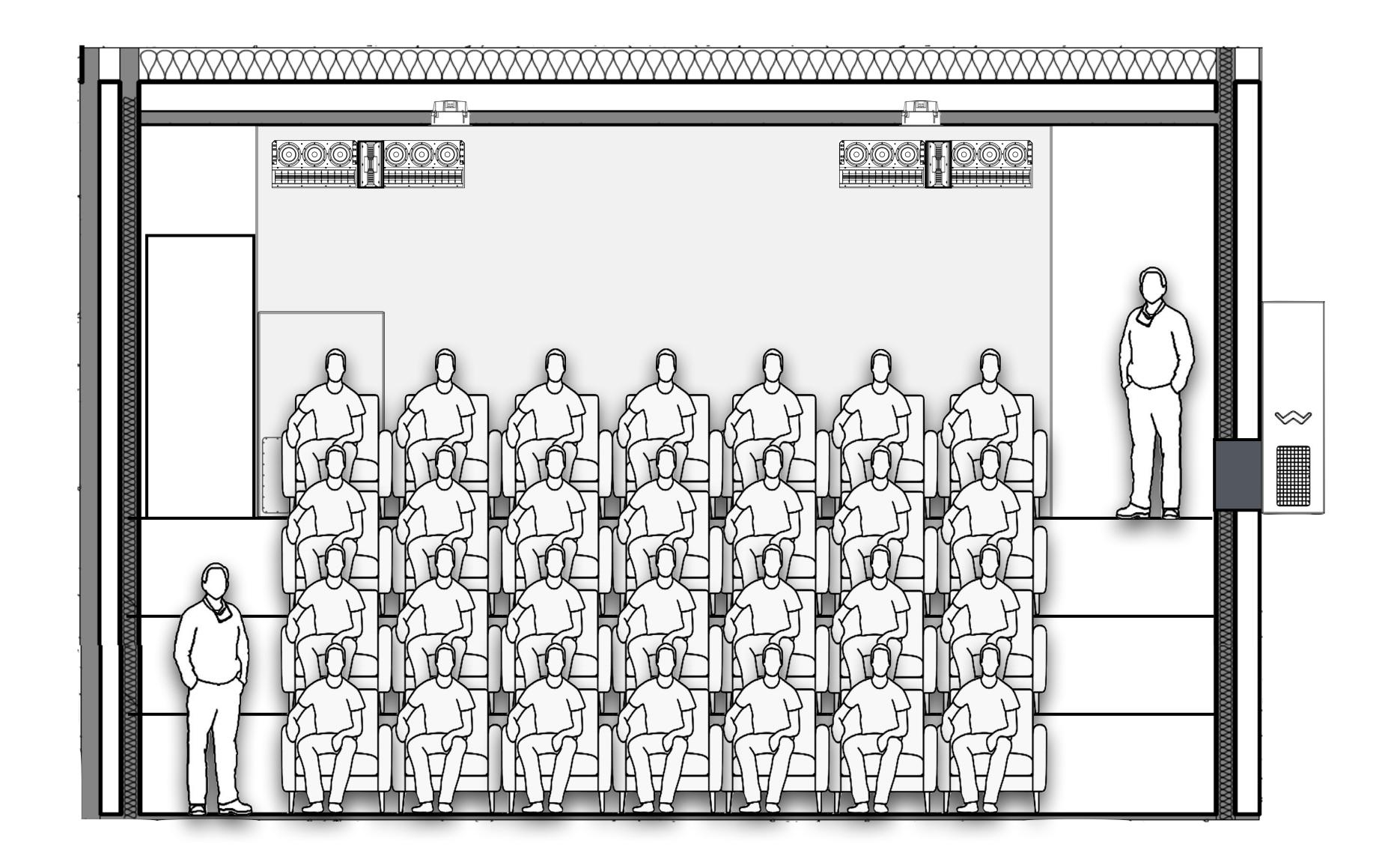






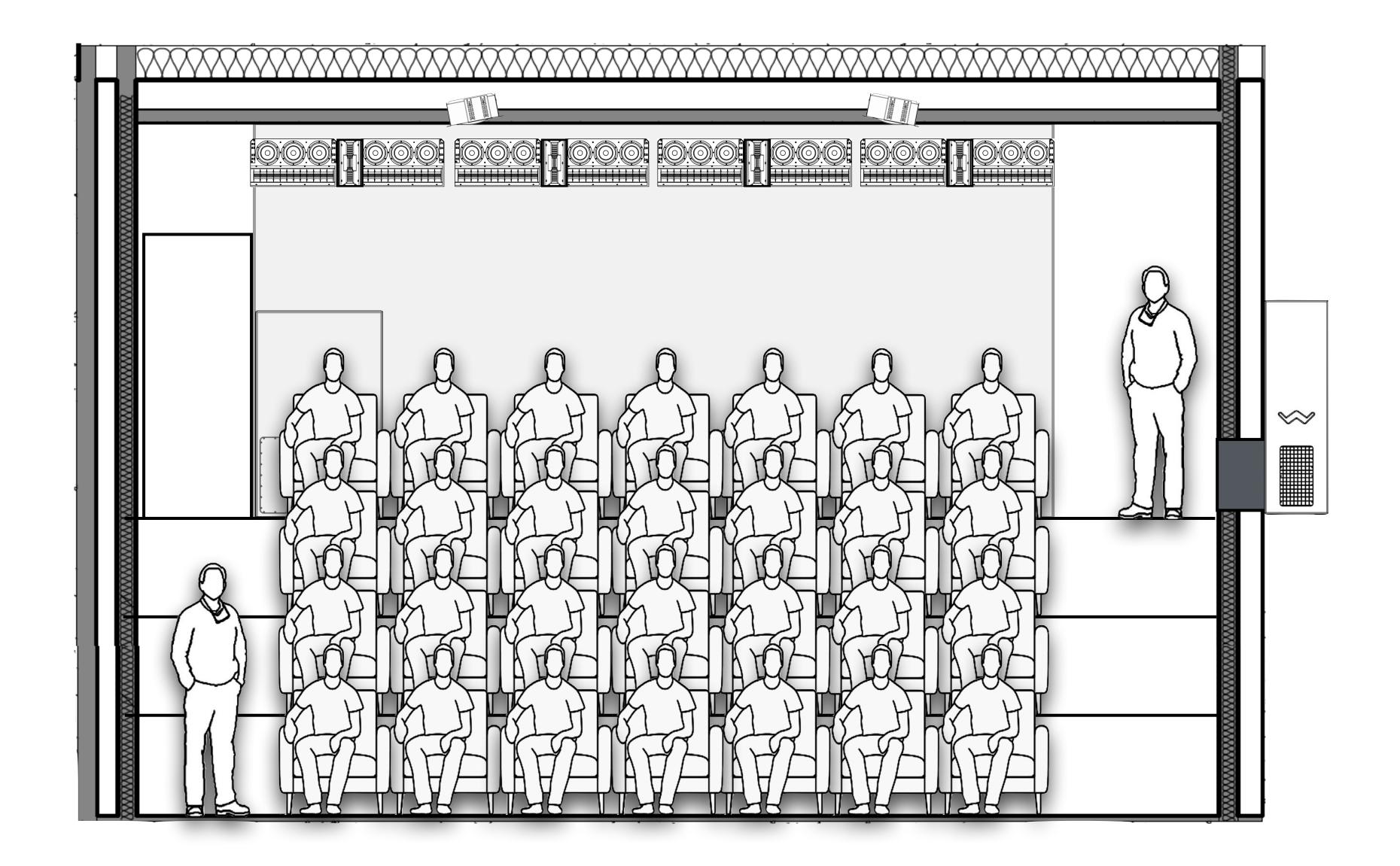






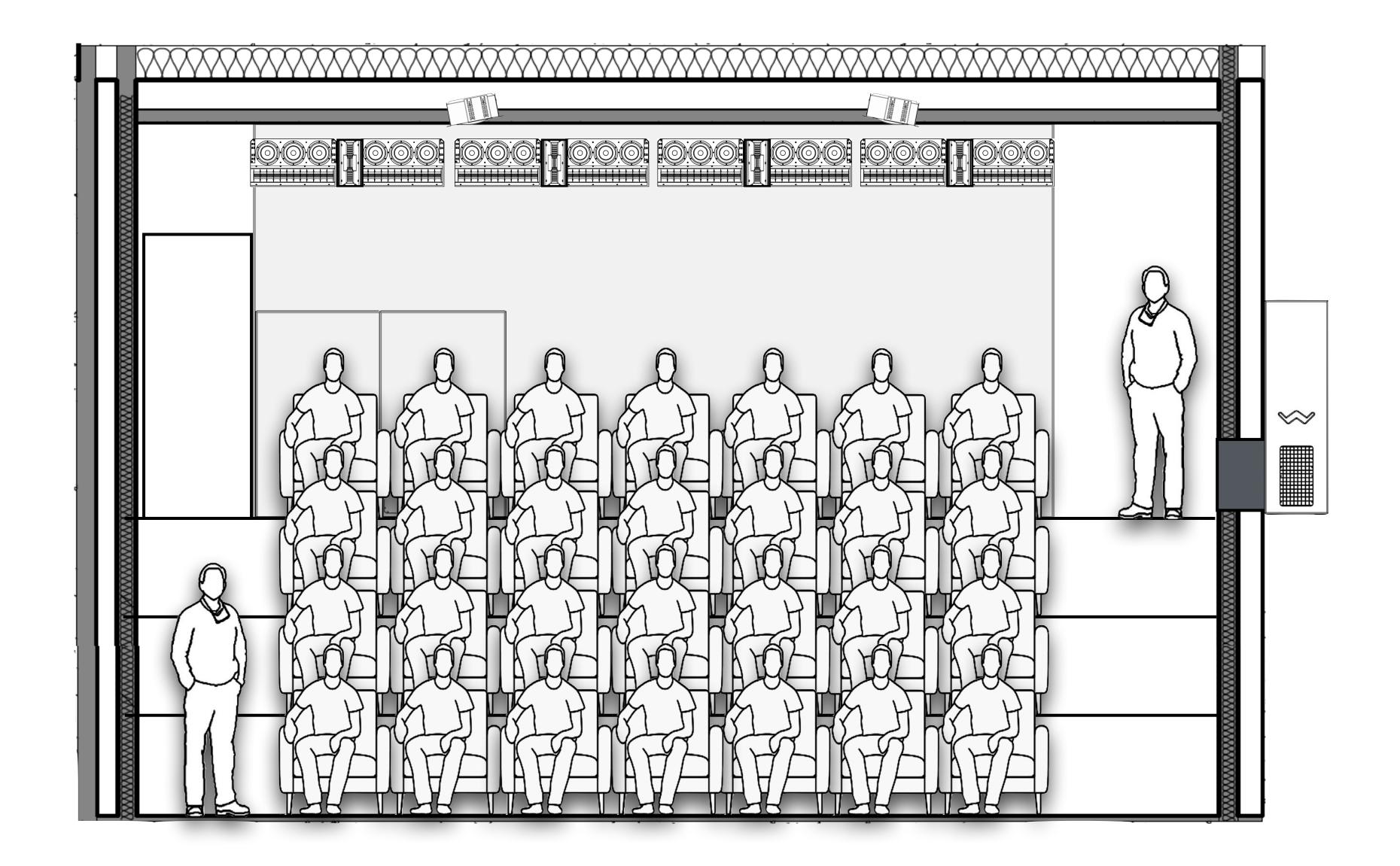












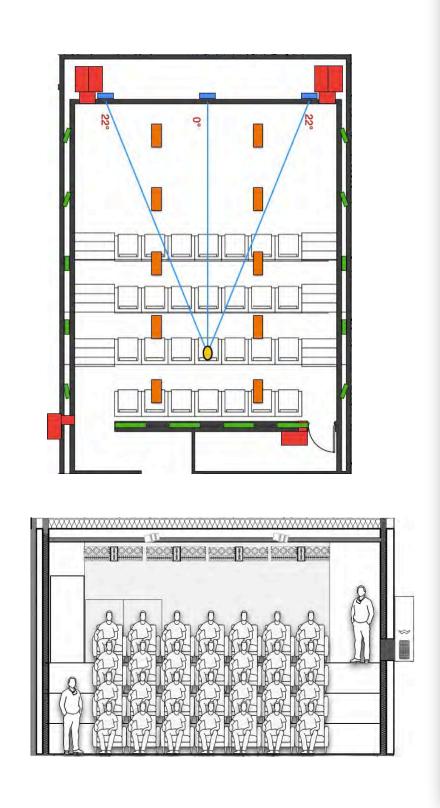


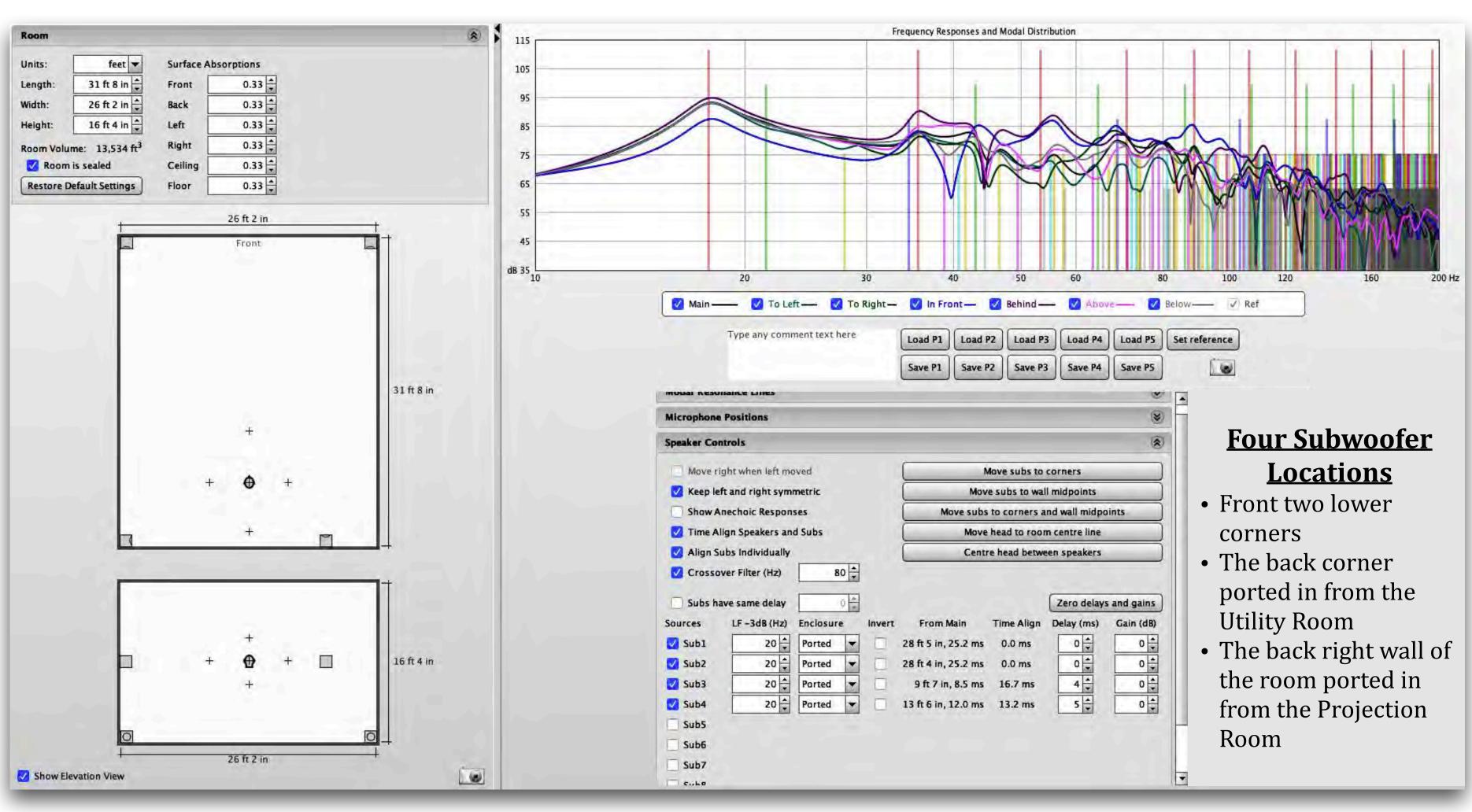
Subwoofer Analysis & Line Source Benefits



Subwoofer Room Analysis

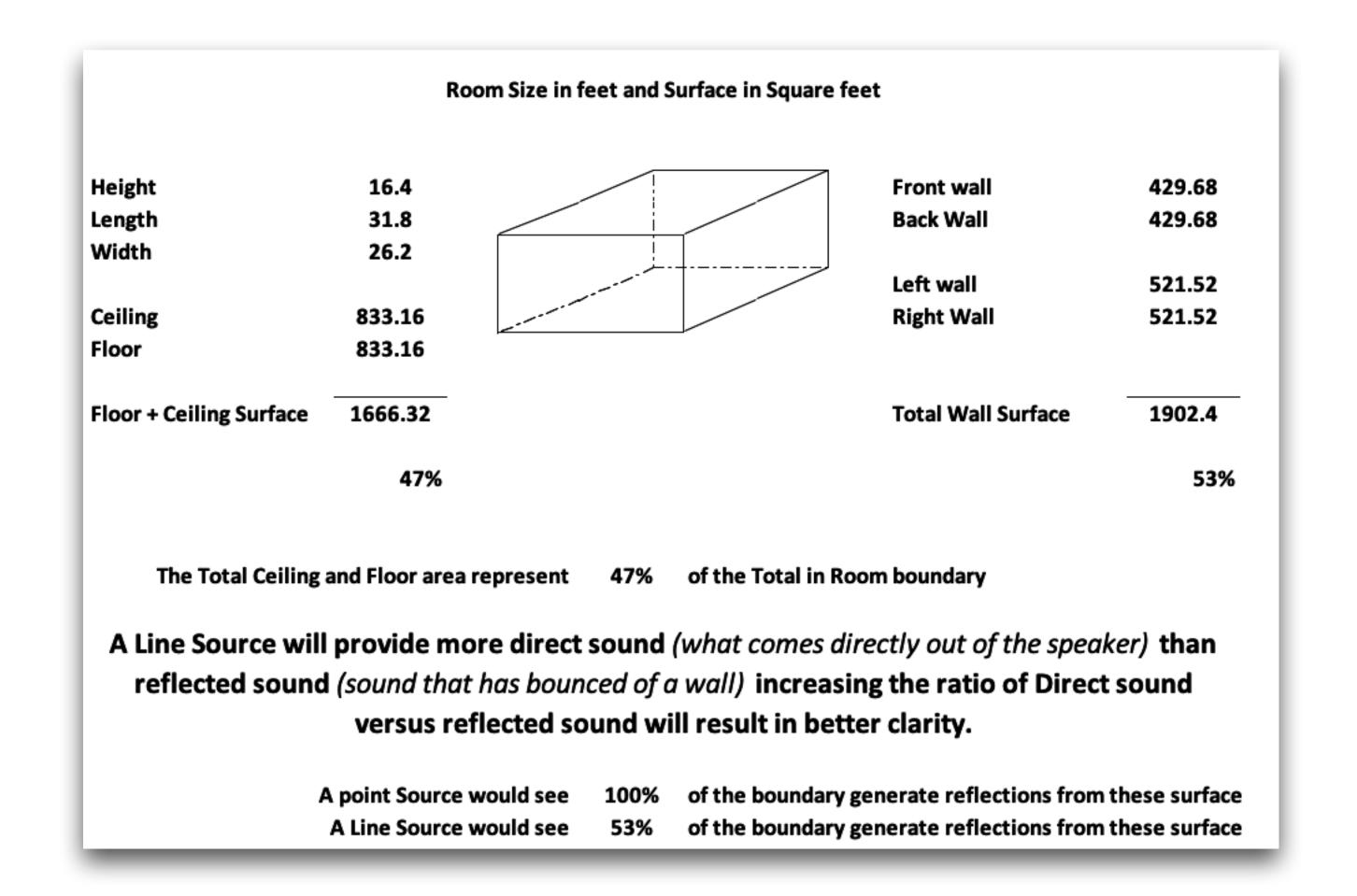


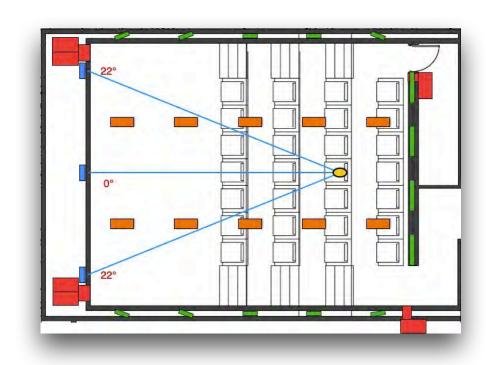












47%
Less room boundary
using Line Source
Speakers versus Point
Source for LCR &
Surround Channels

MORE CLARITY - Line Source provides more direct sound versus reflected sound



Wisdom Audio - Line Source Advantages

Allows you to hear more from the loudspeaker system and less from the room

Energy radiates very wide horizontally, but hardly at all vertically

Controlled vertical directivity virtually eliminates the most harmful effects of floor and ceiling reflections

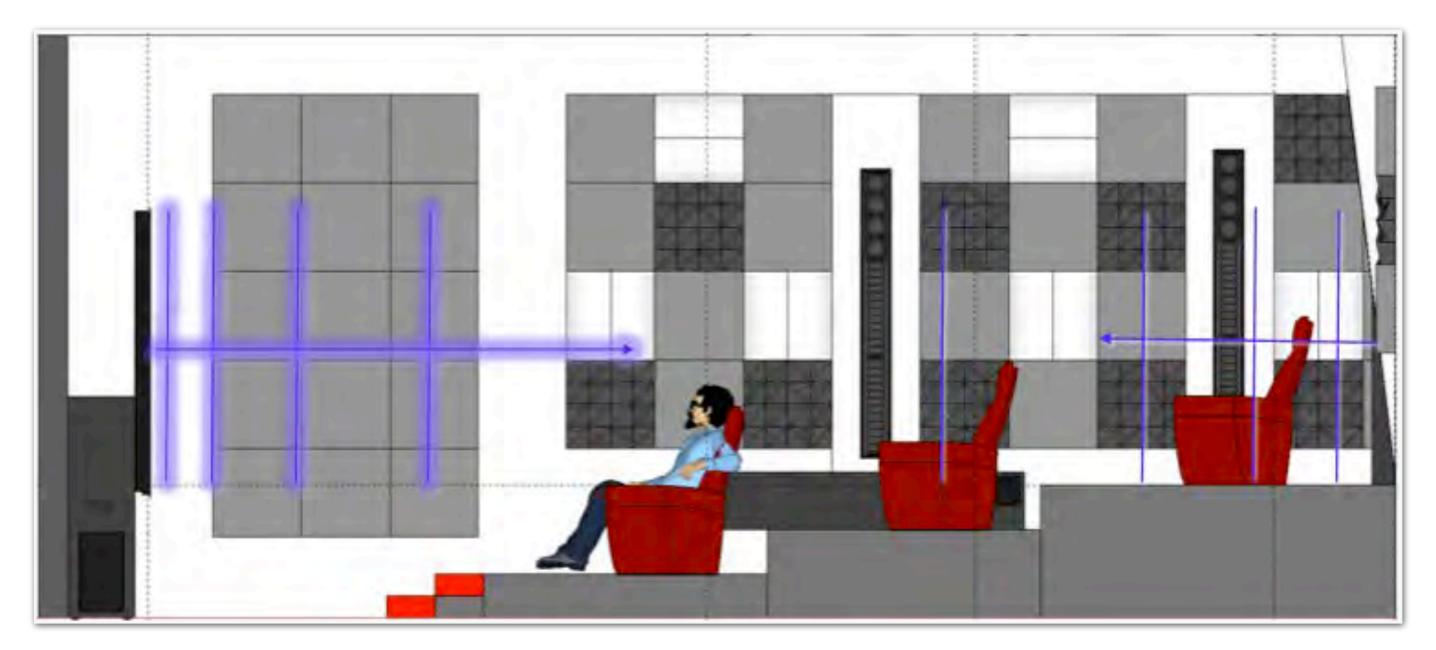
Enhanced clarity and superior intelligibility

More uniform sound level to each listener

Every seat becomes a money seat

Every guest hears much the same volume and quality

LINE SOURCE





POINT SOURCE

CLARITY



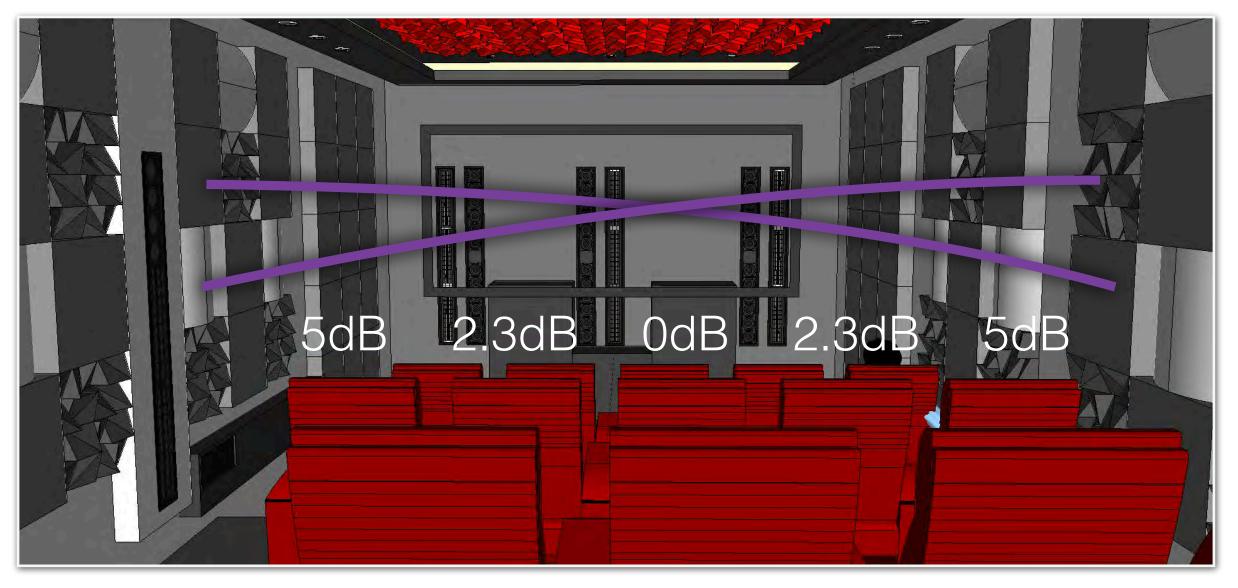


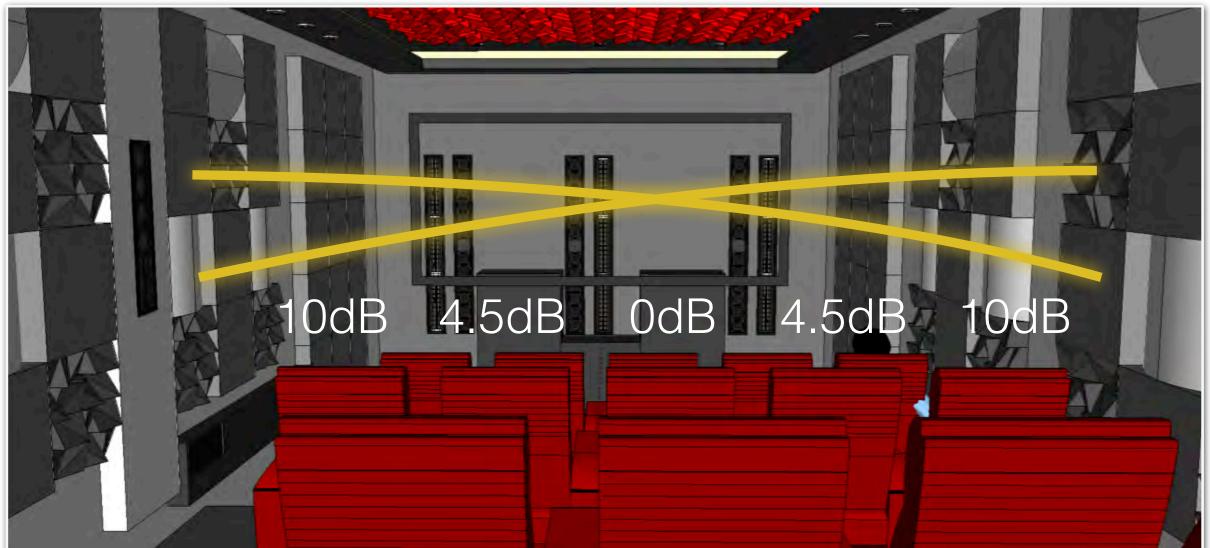
LINE SOURCE

TRUE LINE SOURCE (FLOOR TO CEILING)
INTERAURAL (LEFT/RIGHT EAR) SOUND LEVEL
DIFFERENCE IN THE DIRECT SOUND IN DB



POINT SOURCE INTERAURAL SOUND LEVEL DIFFERENCE IS DOUBLED





Dr Floyd Toole: Sound Reproduction, Focal Press 2008, Chapter 16



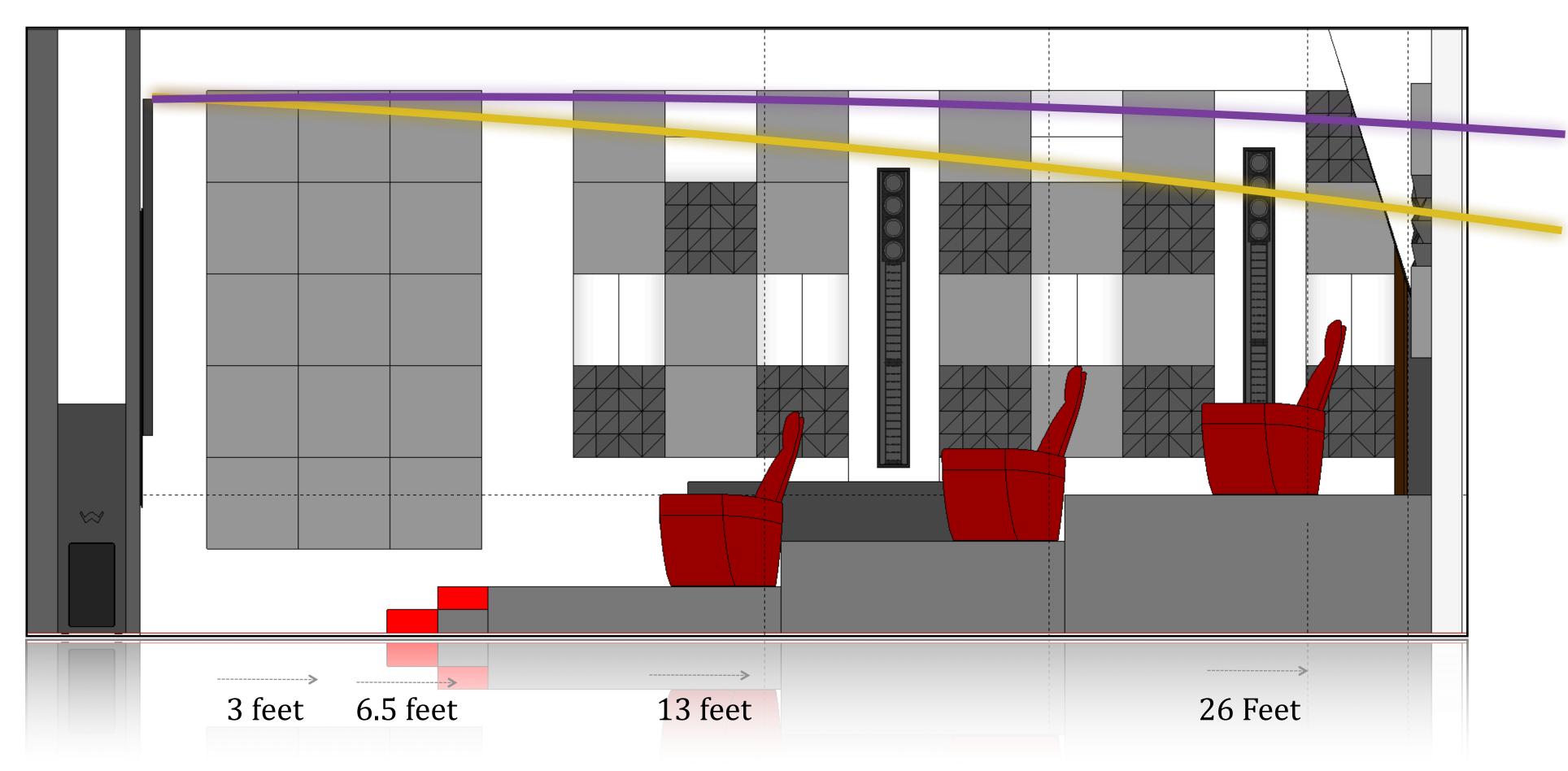
Surround channel Line Source provides twice the seat-to-seat consistency



LINE SOURCE 121 dB SPL 115 dB SPL 113 dB SPL 110 dB SPL

POINT SOURCE 121 dB SPL 106 dB SPL 98 dB SPL

98 dB SPL



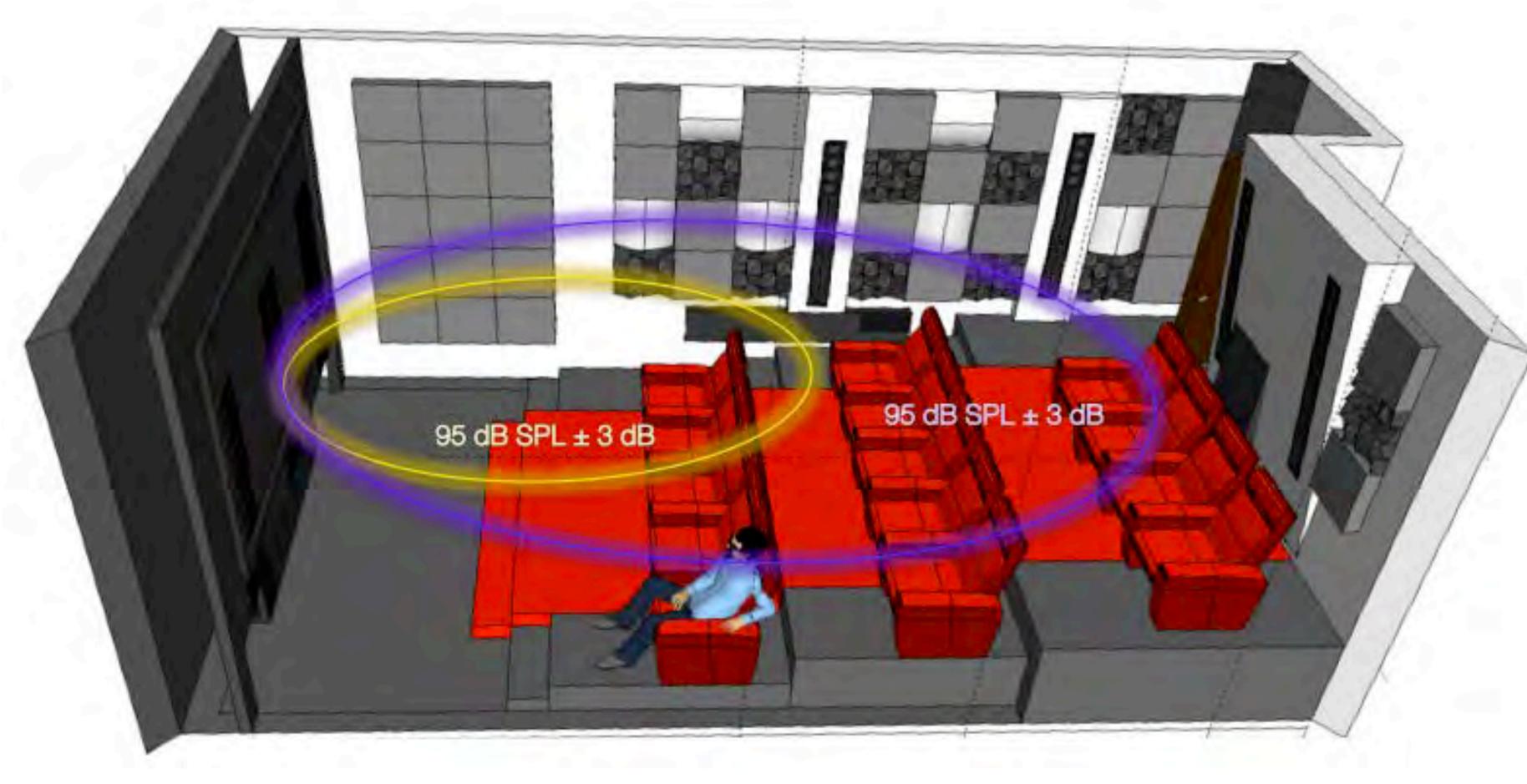
Power Over Distance





Clarity +
Power Over Distance

= Sensory Envelopment



POINT SOURCE

LINE SOURCE

A SHARED EXPERIENCE

LINE SOURCES PROVIDE A WIDER SWEET SPOT



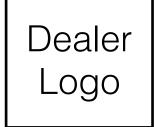
Distributed Audio



Dealer Logo







Overall Master Quotes



	GOOD	BETTER	BEST
	Multiple Zones of Audio	Multiple Zones of Audio	Multiple Zones of Audio
Speaker Models	 Speakers (5) Sage Series ICS7a Point Source (Living RM) (3) Insight Series P4i Point Source (Media RM) (2) Sage Series ICS7a Point Source (Media RM) (2) Sage Series ICS7a Point Source (Maya's RM) (2) Sage Series ICS7a Point Source (Dinning RM) (2) Sage Series ICS7a Point Source (Kitchen) (2) Sage Series ICS7a Point Source (Master Bed RM) (2) Insight Series P2i Point Source (Master Bath RM) (2) Sage Series ICS7a Point Source (Office) (17) ICS7 Rough-in Brackets (3) P4i Rough-in Brackets (2) P2i Rough-in Brackets (2) P2i Rough-in Brackets (2) S90i RTL Subwoofers (Living RM) (2) S90i RTL Subwoofer (Media RM) (1) S55i RTL Subwoofer (Maya's RM) (1) S55i RTL Subwoofer (Dinning RM) (1) S90i RTL Subwoofer (Kitchen) (1) S55i RTL Subwoofer (Master Bed RM) 	Speakers (5) Sage Series ICS7a Point Source (Living RM) (3) Insight Series P4i Point Source (Media RM) (2) Sage Series ICS7a Point Source (Media RM) (2) Sage Series ICS7a Point Source (Maya's RM) (2) Sage Series ICS7a Point Source (Dinning RM) (2) Sage Series ICS7a Point Source (Kitchen) (2) Sage Series ICS7a Point Source (Master Bed RM) (2) Insight Series P2i Point Source (Master Bath RM) (2) Sage Series ICS7a Point Source (Office) (17) ICS7 Rough-in Brackets (3) P4i Rough-in Brackets (2) P2i Rough-in Brackets (2) P2i Rough-in Brackets (1) S50i RTL Subwoofers (Living RM) (1) S55i RTL Subwoofer (Maya's RM) (1) S55i RTL Subwoofer (Dinning RM) (1) S90i RTL Subwoofer (Kitchen) (1) S55i RTL Subwoofer (Master Bed RM)	 Speakers (5) Sage Series ICS7a Point Source (Living RM) (3) Insight Series P4i Point Source (Media RM) (2) Sage Series ICS7a Point Source (Media RM) (2) Sage Series ICS7a Point Source (Maya's RM) (2) Sage Series ICS7a Point Source (Dinning RM) (2) Sage Series ICS7a Point Source (Kitchen) (2) Sage Series ICS7a Point Source (Master Bed RM) (2) Insight Series P2i Point Source (Master Bath RM) (2) Sage Series ICS7a Point Source (Office) (17) ICS7 Rough-in Brackets (3) P4i Rough-in Brackets (2) P2i Rough-in Brackets (2) P2i Rough-in Brackets (2) S90i RTL Subwoofers (Living RM) (2) S90i RTL Subwoofer (Maya's RM) (1) S90i RTL Subwoofer (Dinning RM) (1) S90i RTL Subwoofer (Kitchen) (1) S90i RTL Subwoofer (Master Bed RM)
	(1) S55i RTL Subwoofer (Master Bath RM)(1) S55i RTL Subwoofer (Office)	(1) S55i RTL Subwoofer (Master Bath RM)(1) S55i RTL Subwoofer (Office)	 (1) S55i RTL Subwoofer (Master Bath RM) (1) S90i RTL Subwoofer (Office)
Electronics & Cables	 (2) SC-3 System Controller w/Dirac Room Correction (10) SW-1 RTL Subwoofer Amplifiers 	 (2) SC-3 System Controller w/Dirac Room Correction (10) SW-1 RTL Subwoofer Amplifiers (2) SA-2 Amplifiers (6) SA-3 Amplifiers 	 (2) SC-3 System Controller w/Dirac Room Correction (1) SA-2 Amplifier (10) SA-3 Amplifiers (2) WWK-BB3 Custom Wire Kits for SC-3's
Services	• (1) Whole Home Factory Calibration & Room Commissioning	• (1) Whole Home Factory Calibration & Room Commissioning	• (1) Whole Home Factory Calibration & Room Commissioning
System Total (MSRP)	\$115,750	\$161,750	\$185,350



Overall Master Quotes System Advantages



	GOOD Multiple Zones of Audio	BETTER Multiple Zones of Audio	BEST Multiple Zones of Audio
System Advantages, Benefits, and Requirements	 Great Wisdom Audio Signature Sound Clarity and details using Planar Magnetic Drivers (PMD) All Planar Magnetic Drivers cover 5 Octaves Articulated bass using Regenerative Transmission Line Subwoofer Technology (RTL) SC-3 System Controller allowing for full calibration for each zone of audio Factory Calibration and Room Commissioning * This option will require two surround sound processors * This option will require outboard amplification for the following rooms: ✓ Living RM - 5 Channels ✓ Media RM - 5 Channels ✓ Maya's RM - 2 Channels ✓ Dinning RM - 2 Channels ✓ Kitchen - 2 Channels ✓ Master Bed RM - 2 Channels ✓ Master Bath RM - 2 Channels ✓ Office - 2 Channels ✓ Office - 2 Channels * Outboard recommended amplifiers: ✓ Crown DCi 8 300N ✓ Audio Control ✓ Marantz MM8077 * Recommended surround processor: ✓ Marantz AV7705 	All the GOOD System attributes plus • The BETTER system upgrades to using Wisdom SA Amplifiers for all main and surround channels for all zones • Improved clarity, output, and dynamics in all zones * This option will require two surround sound processors * Recommended surround processor: ✓ Marantz AV7705	 All the BETTER System attributes plus The BEST system upgrades to using Wisdom SA Amplifiers for not only all speakers, but also all RTL Subwoofers. This will provide an increase of 130 additional watts per subwoofer from 370 to 500 Watts The BEST system upgrades to using the S90i RTL Subwoofer in the following rooms: Maya's RM, Dinning RM, Master Bed RM, and the Office The BEST systems include using the Custom Interconnect Wire Kits for all zones Improved system dynamics for all zones * This option will require two surround sound processors * Recommended surround processor: ✓ Marantz AV7705





The following are Overhead Speaker Layouts for the Summer Home Project



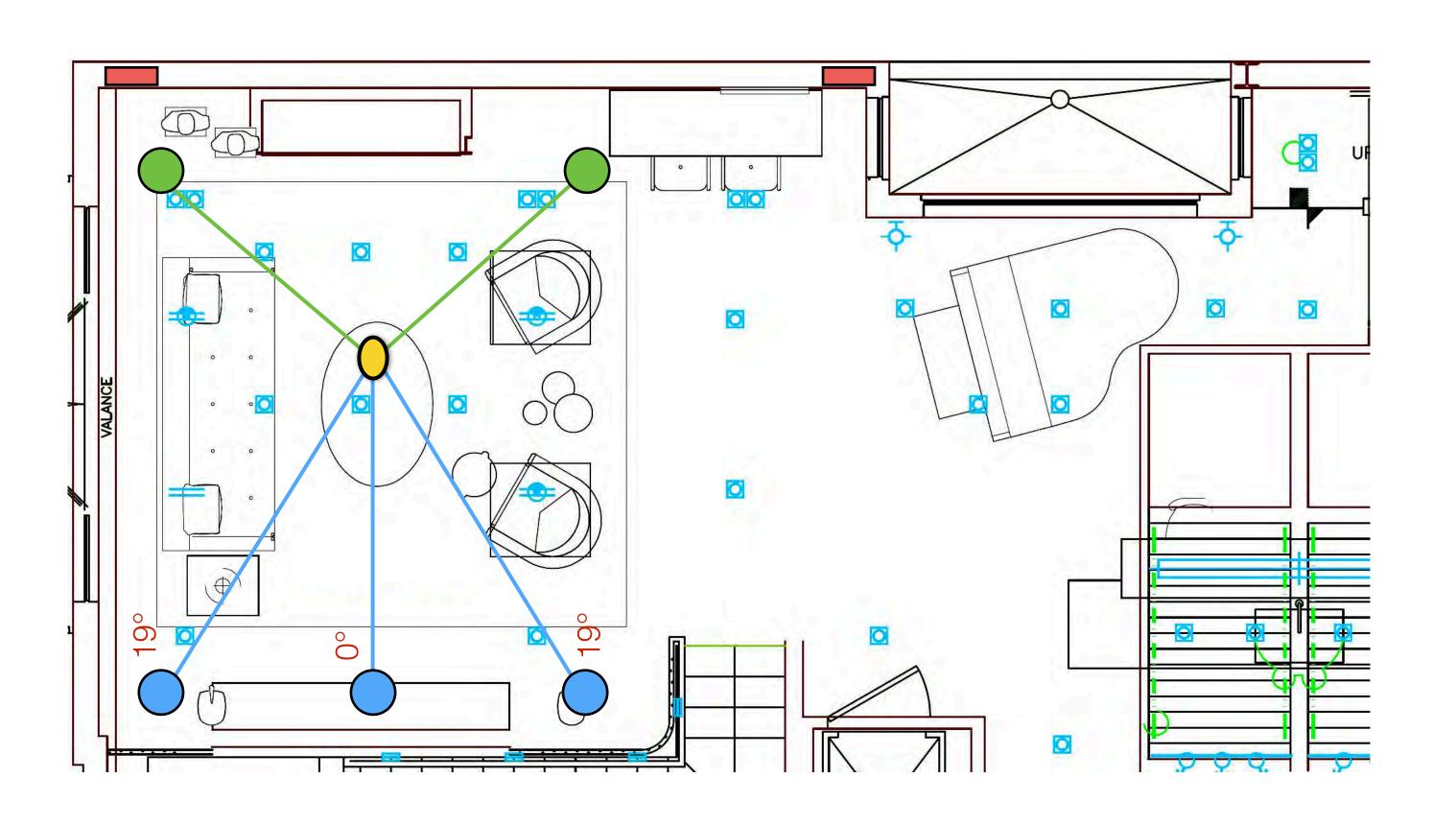




= Rear CH's

= Subwoofers

= Reference Listening Point



Overhead Speaker Layout - Living Room Surround System



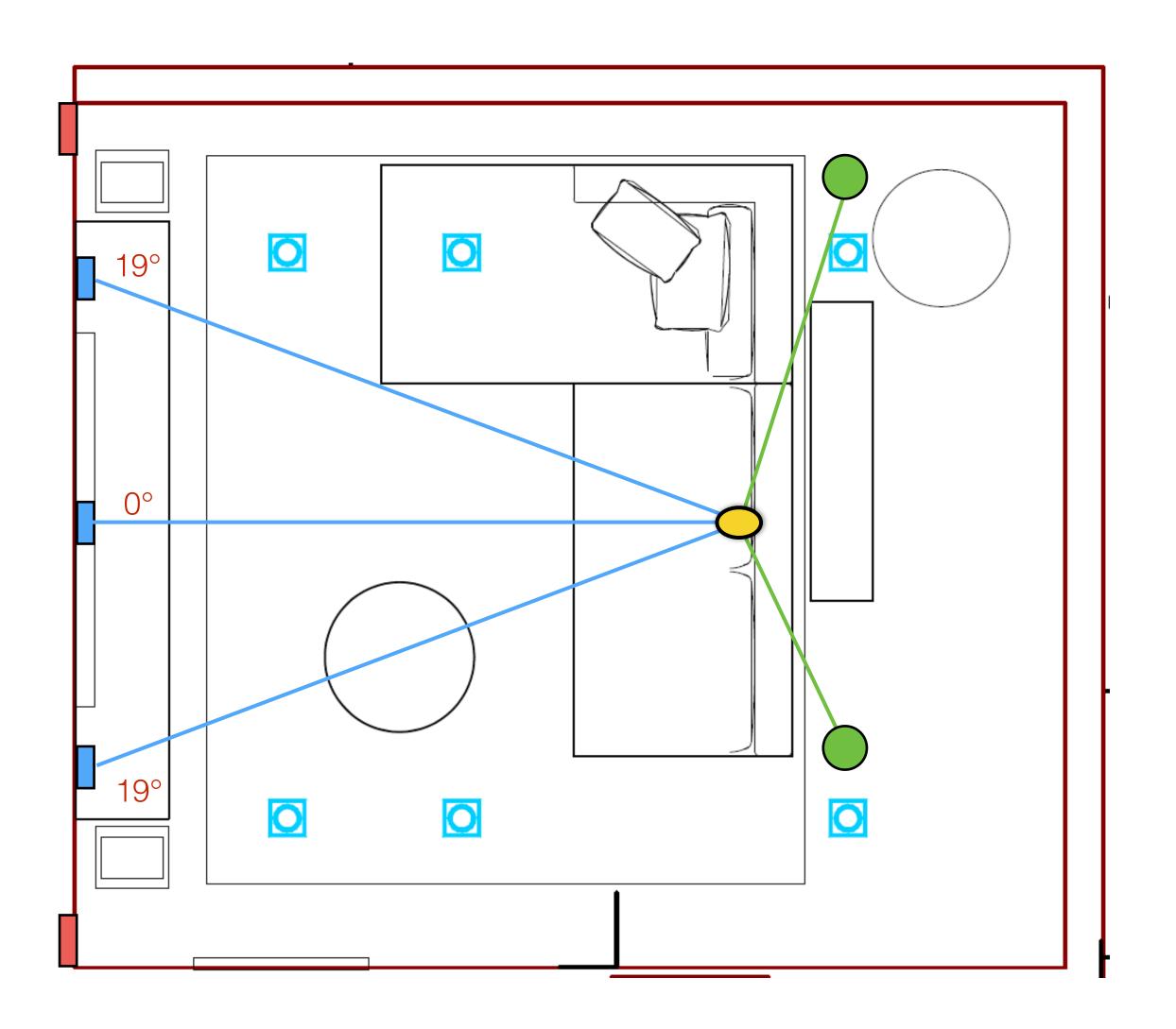




= Rear CH's

= Subwoofers

= Reference Listening Point



Overhead Speaker Layout - Media Room Surround System

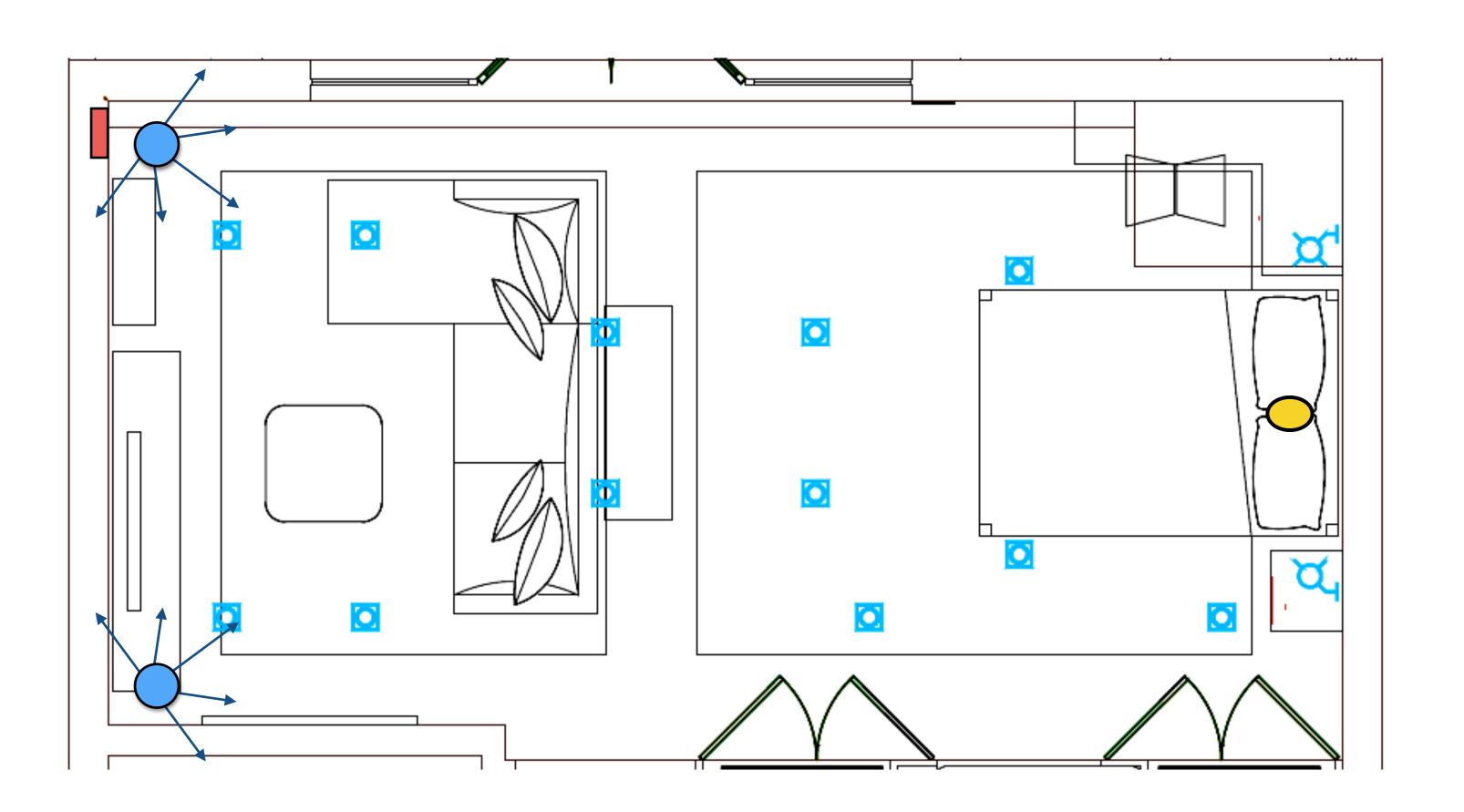






= Subwoofer

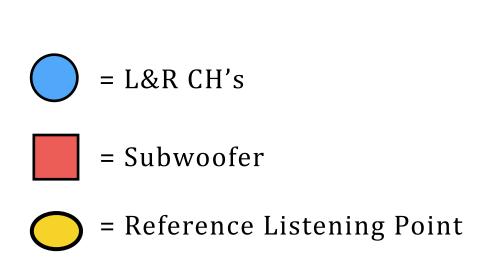
= Reference Listening Point

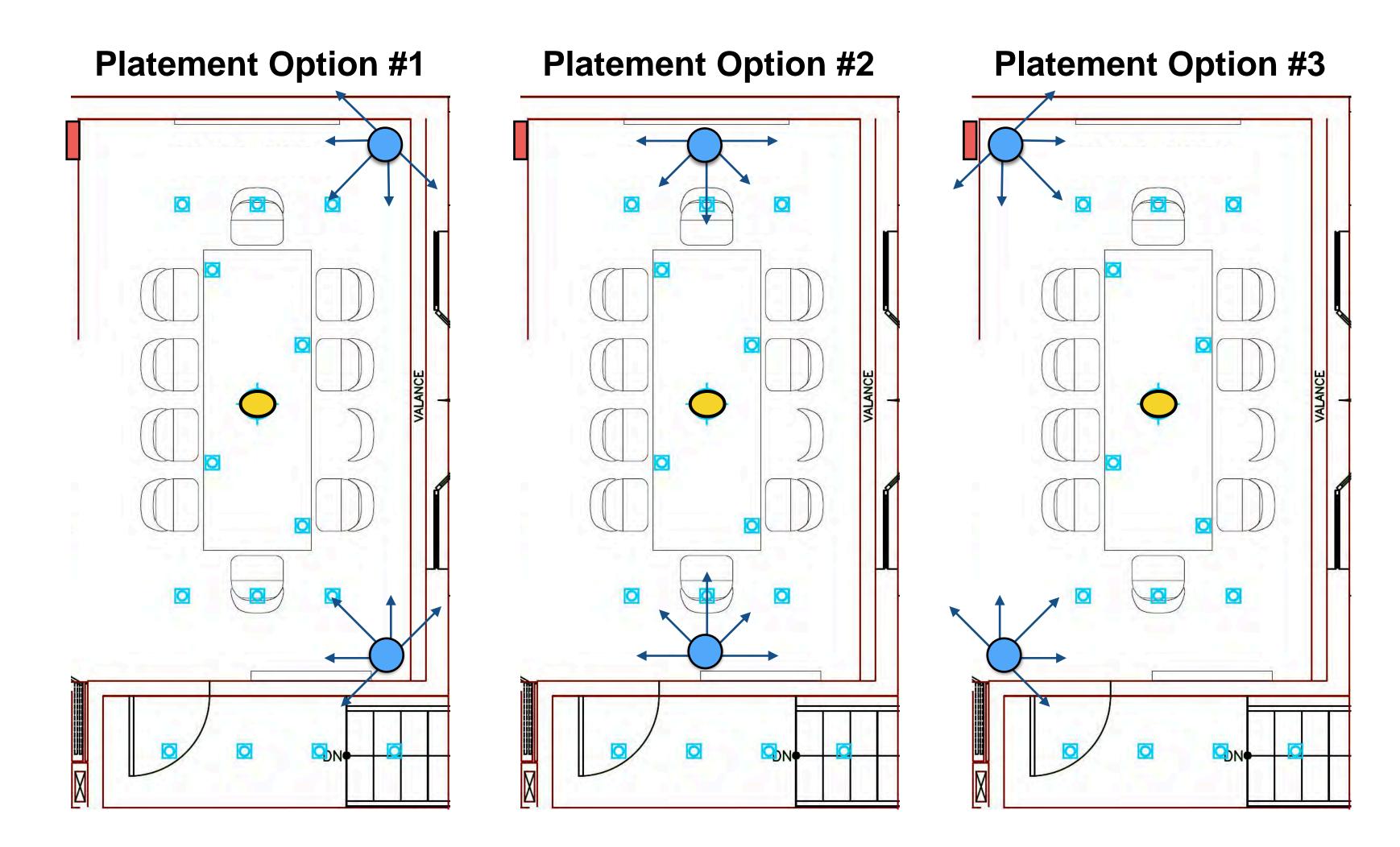


Overhead Speaker Layout - Maya's Room





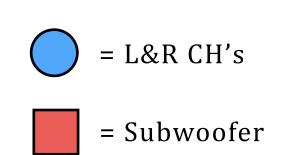


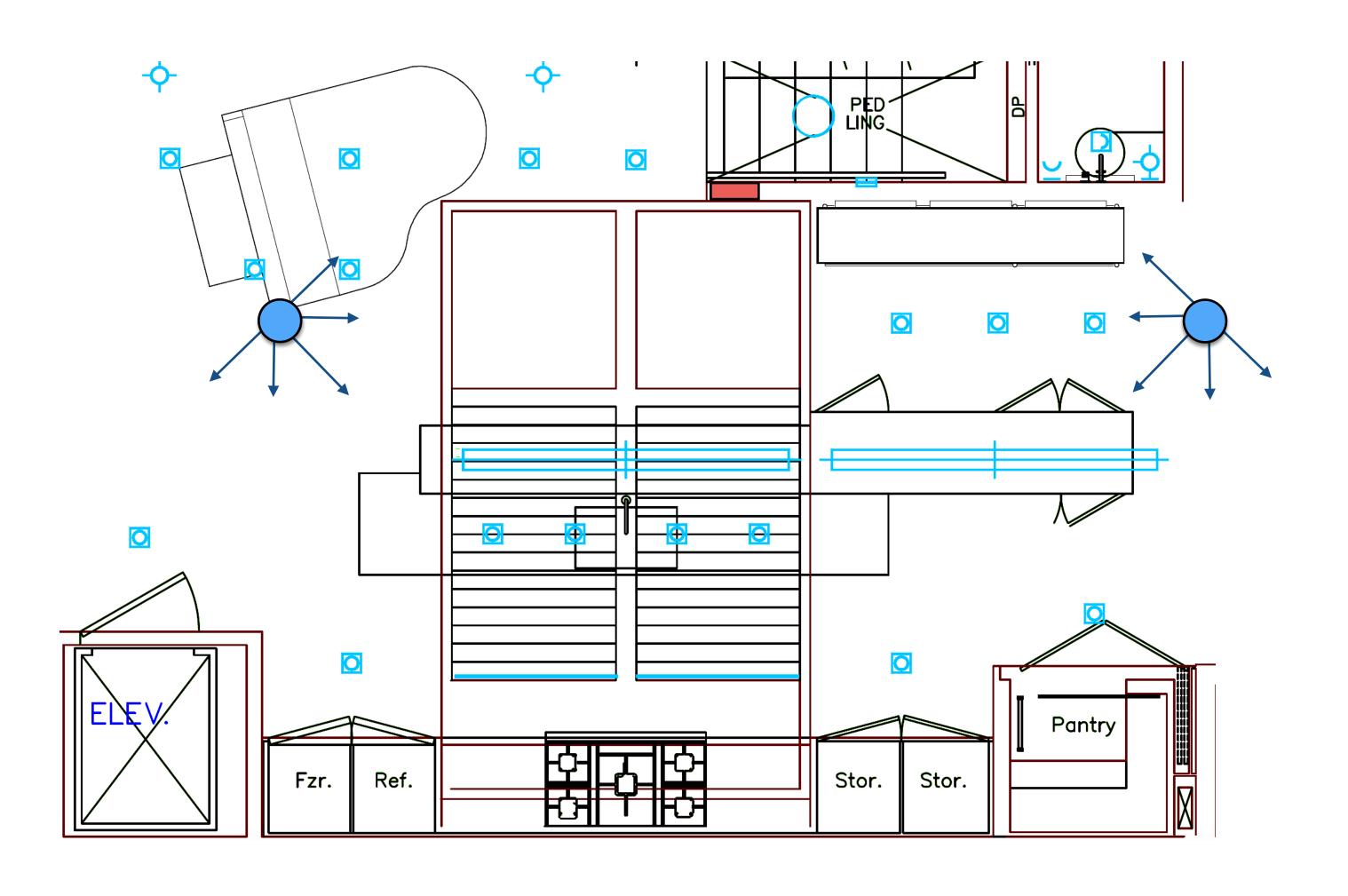


Overhead Speaker Layout - *Dinning Room*







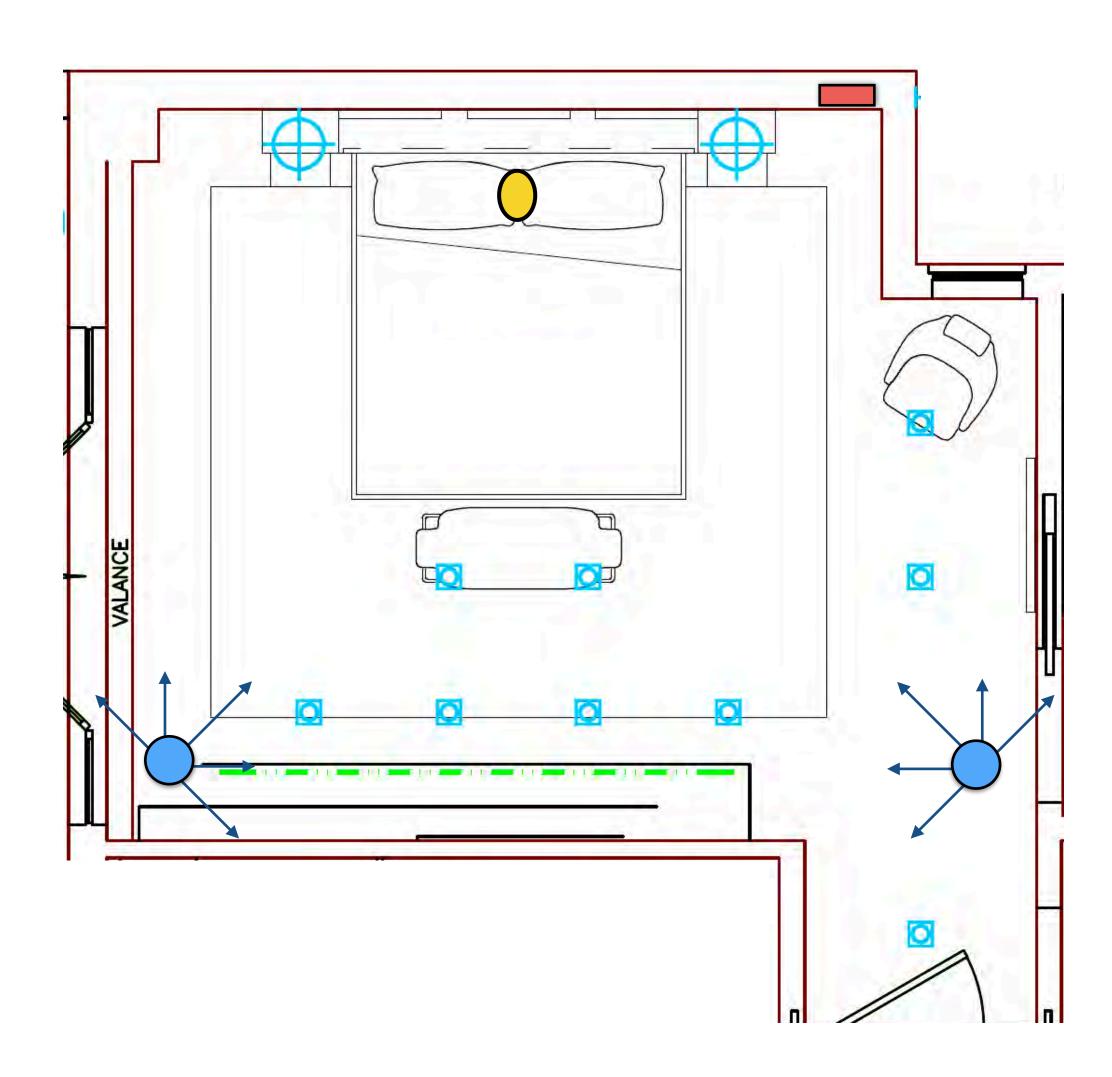


Overhead Speaker Layout - Kitchen





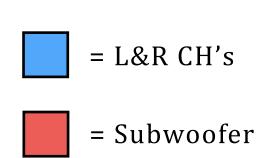
- = L&R CH's
- = Subwoofer
- = Reference Listening Point

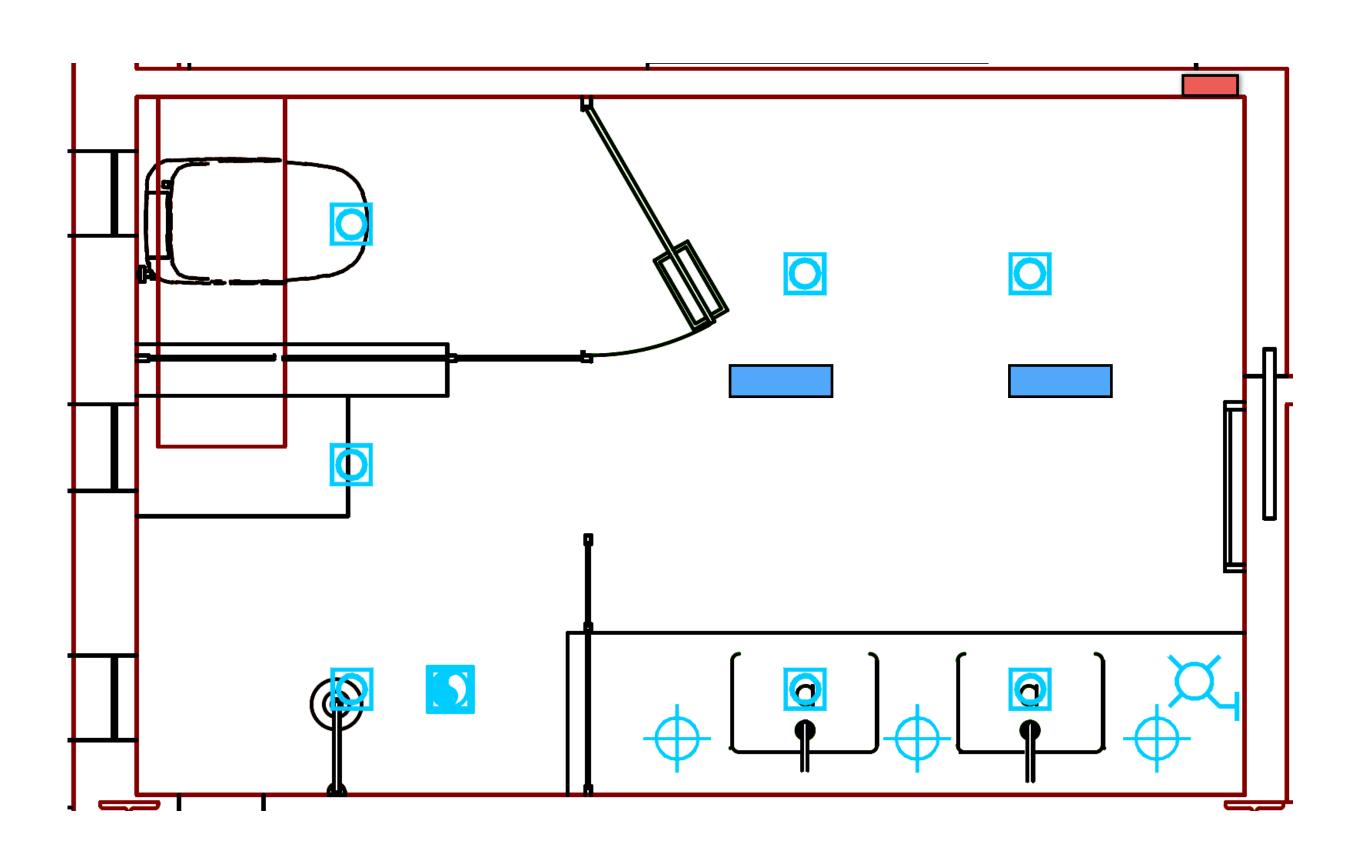


Overhead Speaker Layout - Master Bedroom





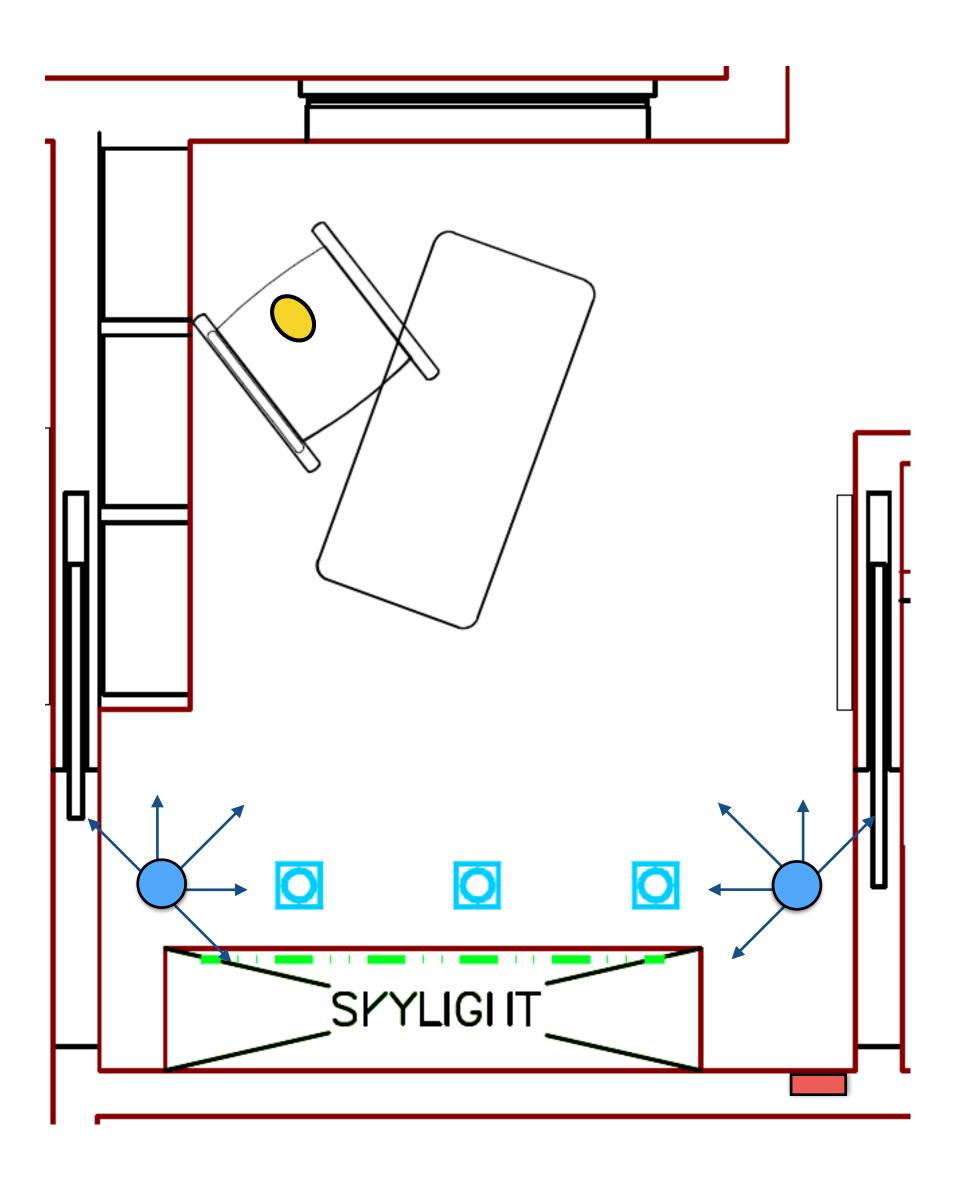








- = L&R CH's
- = Subwoofer
- = Reference Listening Point



Overhead Speaker Layout - Office











Living Room Front Wall Elevation Renderings









L75 in-wall or on-wall



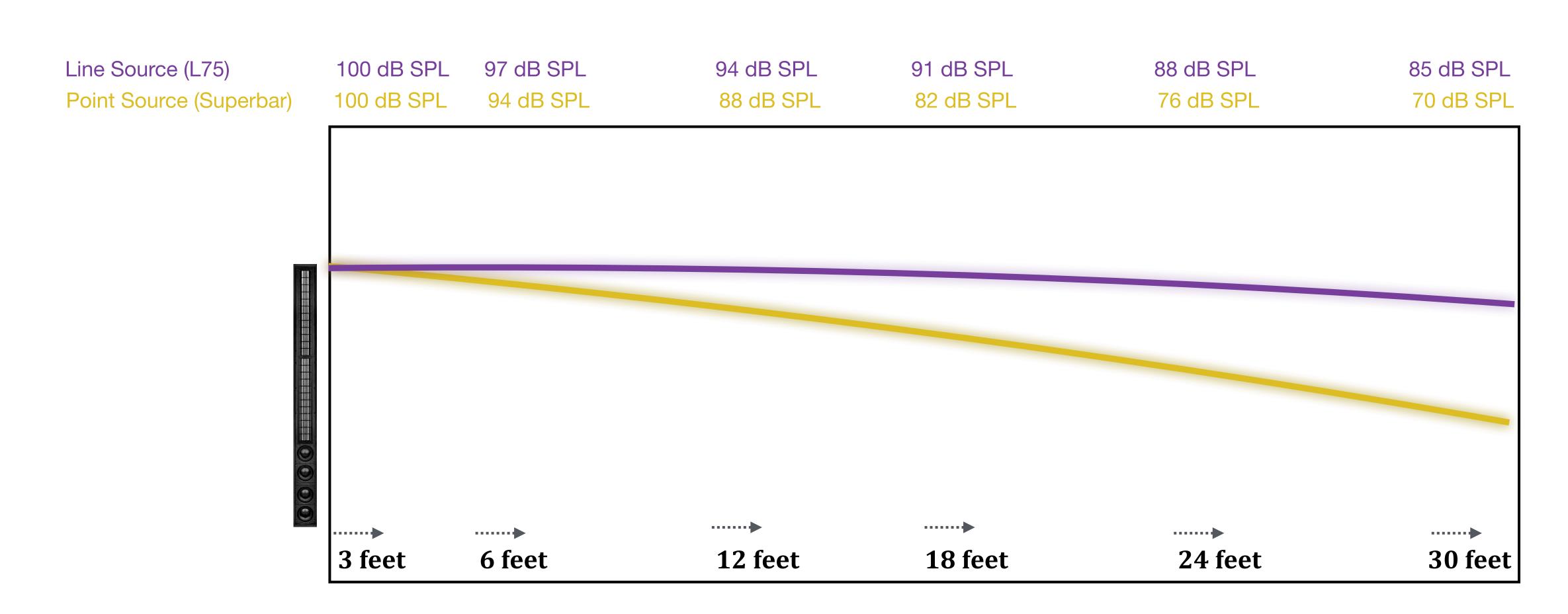
L75 in-wall or on-wall - Custom Length

Living Room Front Wall Elevation Renderings



Living Room





POWER OVER DISTANCE

LINE SOURCES HAVE 1/2 THE PROPAGATION LOSS OF POINT SOURCES, PROVIDING BETTER SOUND CONSISTENCY IN A LARGE ROOM



Wisdom Audio - Line Source Advantages

Allows you to hear more from the loudspeaker system and less from the room

Energy radiates very wide horizontally, but hardly at all vertically

Controlled directivity virtually eliminates the most harmful effects of floor and ceiling refections

Enhanced clarity and superior intelligibility

More uniform sound level to each listener

Every seat becomes a money seat

Every guest hears much the same volume and quality

LINE SOURCE



POINT SOURCE



CLARITY

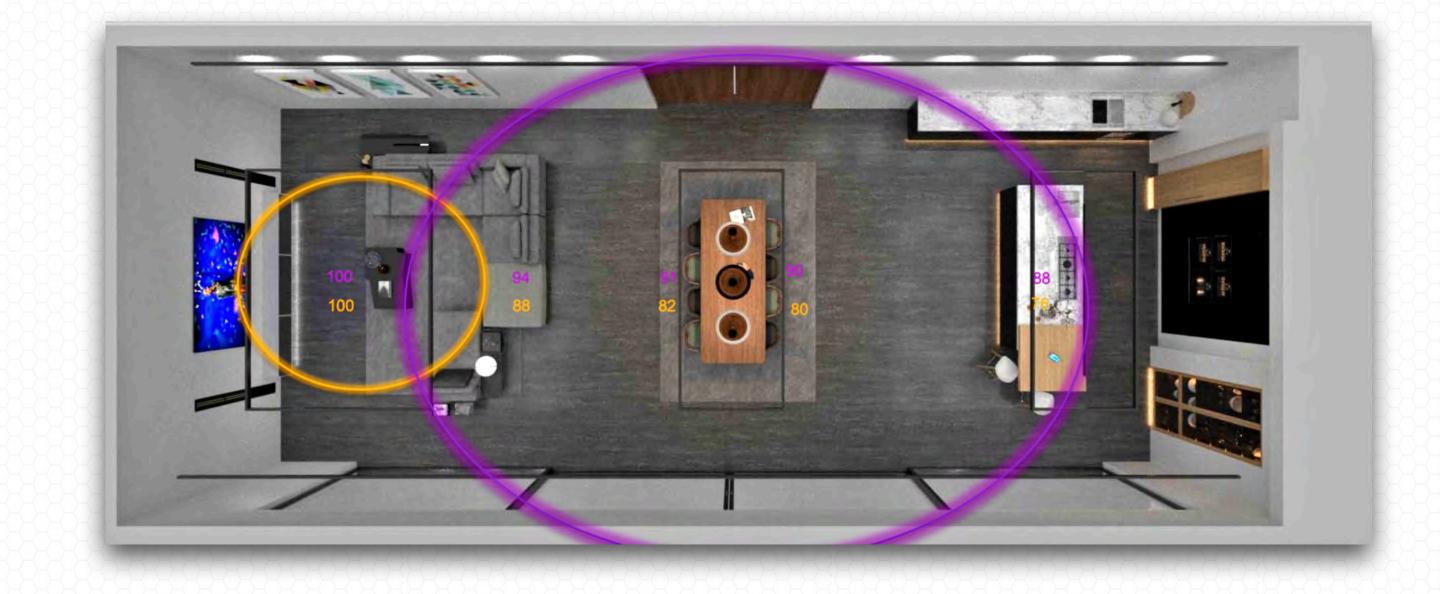


LINE SOURCE

91dB SPL +/- 3 dB

POINT SOURCE

91dB SPL +/- 3 dB



LINE SOURCE

94dB SPL +/- 6 dB



A SHARED EXPERIENCE

LINE SOURCE PROVIDES A WIDER SWEET SPOT

