

IAC Acoustics Sentry®

Modular Sensitive Compartmented
Information Facilities



- Bullet resistant
- Fire-rated and UL approved
- Wind and seismic approved
- Modular construction
- Interior aesthetics
- Weather-resistant
- Fully demountable and relocatable
- Provide RF/acoustic shielding and physical security





IAC Acoustics Sentry®

Modular Sensitive Compartmented Information Facilities

IAC Acoustics has been long regarded as the leader in the development of modular Secure Sensitive Compartmented Information Facilities (SCIF) and RF/Acoustic Shielded facilities and products.

These facilities are now available with Accutone2 enhanced performance. The Accutone2 Sentry Series combines industry-rated, laboratory tested and proven in-field performance with contemporary aesthetics that offer the look and feel of traditional construction within modular units.

IAC Acoustics' new range of architectural acoustic rooms are completely engineered environments with interior acoustic treatments, providing a variety of colors and finishes to complement any architectural design.

The prefabricated panel design makes for simple and cost effective installation giving dimensional flexibility and offering both solo and group spaces.

Design Advantages:

- Guaranteed sound isolation ratings
- Cleaner and faster installation
- Easily expanded or relocated/demountable
- Closure panels produce a complete built-in appearance for multi-room suites

Options Include:

- Custom room dimensions
- Floating/isolated floors
- Custom acoustic treatments
- Floor finishes

Accutone2

ANY SIZE • ANY SHAPE • ANY COLOR

Custom Facilities

IAC Acoustics is able to design and install rooms of virtually any size and shape to solve specific client issues.



Features

- Complete assemblies are acoustically rated
- Aesthetically pleasing, weather-resistant cladding
- Handle wind loads as high as 120 miles per hour and roof loads of 50 lb/sq ft or higher
- Resist seismic loads of Zone 4 magnitude without additional external support
- UL, wind and seismic approvals
- Bullet resistant construction
- Light-weight, 4" thick panels available with RF shielding within shell construction
- Fire rated
- Magnetic seals for doors
- Silent ventilation systems
- Laminate wood floor covering
- Integral LED lighting, integrated power outlets and light/fan switches

Turn-key Solutions

Variations in traditional construction, including the specification and installation of doors and the ventilation design, have the ability to seriously compromise the acoustical adequacy of a SCIF installation.

IAC Acoustics Accutone2 Sentry enclosures are delivered as complete turn-key units that include:

- Walls
- Doors
- Ceiling (or roof)
- Ventilation systems
- Wave-guide-beyond-cutoff filters
- Silencers
- Alarm systems
- Power and communication filters

The Accutone2 Sentry enclosures also offer a completely flexible selection of fabric panels, acoustical liners and carpeting in five color-ways that combine to create palettes ranging from monochromatic to complementary.

Other space-enhancing options include:

- Chair rails
- Fabric top-paneling
- Computer floors
- Interior finishes for floors and desktops



IAC Acoustics' Accutone2 Sentry Series can be configured to suit virtually any shape and size — allowing you to custom design your very own individual space.

Optional Finishes Include:

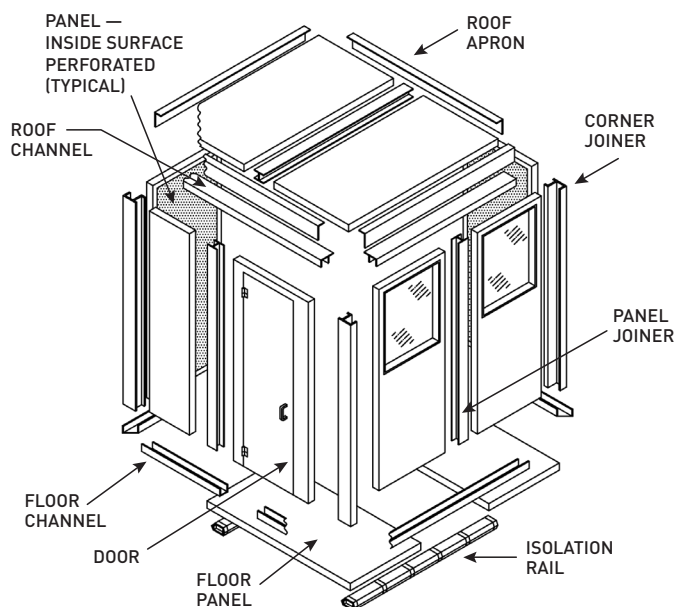
- Laminate flooring
- Glazed doors
- Acoustic windows
- Foam acoustic panels in a range of colors and fabrics including printing your own design
- Absorption packages
- Wire mold



Less Real Estate, Better Performance

Although acoustic-frequency and radio-frequency phenomena obey the same basic wave-theory equations, in traditional construction, they often are regarded as requiring separate attenuations and individual construction in which an RF enclosure is encased in an acoustical room made of either masonry or sheet-rock-and stud construction. The result requires wall thickness of as much of 24" and generates a weight that precludes construction anywhere but on solid ground. Finally, without rigorous attention to detail, the acoustic facility has the potential to fail the acoustical specification.

IAC Acoustics' Accutone2 Sentry system is built from panels which are only 4" thick. The fire retardant panels, of welded steel construction, are filled with sound-absorbing and dampening material. They are lightweight and modular for security. Panels are tightly connected and reinforced with steel joiners for additional structural strength. They may be ordered with RF shielding installed.





IAC Acoustics Sentry® Advantages

Economic Advantages

Accutone2 Sentry rooms are fully demountable and relocatable. Because RF/acoustic and physical security is provided in a single-perimeter structure, relocation can easily be accomplished without loss of acoustic or RF shielding effectiveness.

As fully demountable structures, they can be purchased with equipment funds rather than construction funds. Accutone2 Sentry rooms also qualify for accelerated depreciation tax benefits according to Internal Revenue Service Ruling 75-178. Savings, compared to welded-shell alternatives, can be as much as 25% of the purchase price.

Modular Components for Use in Traditionally Constructed Secure Facilities

Noise-Lock® Doors can be RF shielded, comply with requirements and are acoustically rated at an STC rating to match panel construction. IAC Acoustics' unique cam-lift hinge allows for "Zero" threshold height. RF/acoustic contact seals eliminate the need for lever action door latching.

Silencers

IAC Acoustics' extensive line of silencers satisfies almost any acoustic and pressure-drop requirement. RF attenuators are incorporated into all silencers. Silencers can be matched to meet STC, specifications of modular and welded structures.

Panels

Accutone2 Multi-Wave RF-shielded panels are four inches thick and constructed with galvanized steel on both sides. Panels are filled with compressed sound-absorbing and retarding elements and welded to form an intrusion-resistant construction. When used in demountable construction, panel-joints are shielded with a continuous-roll-formed galvanized steel section. When used in permanent construction, panels are factory welded into shipping modules for field assembly or complete rooms.

Acoustic Performance

Accutone2 Sentry is available in four levels of acoustic performance, all of which meet or exceed the NIC sound groups. Accutone2 Sentry panels can offer an STC rating as high as 61 dB and RF shielding effectiveness of 50 dB at 1 GHz. By comparison, the traditional wood-product-core RF shield panel construction will typically offer an STC rating of 35 dB and an RF shielding effectiveness of approximately 50 dB at 1 GHz. All Accutone2 specifications are laboratory tested and in-field proven.

STC Ratings & Weights of Accutone2 Sentry Modular Building Components

Component	STC	Weight (lb / ft ²)	Thickness (inches)
Noishield Panel	40	8	4
Sentry Noishield	56	9.5	4
Noise-Lock I Panel	44	9.5	4
Noise-Lock II Panel	45	10.5	4
Noise-Lock IV Panel	44	7	4
Noise-Lock V Panel	55	10	4
Fire-Noise-Lock Panel	45	11	4
Sentry Noise-Lock II Panel	61	11.5	4
Super Noise-Lock Panel	48	15	4
Gemini Noise-Lock Panel	70	2	12

Metric equivalent: 1 lb / sq ft = 47.88 N / m²

1" = 25.5 mm

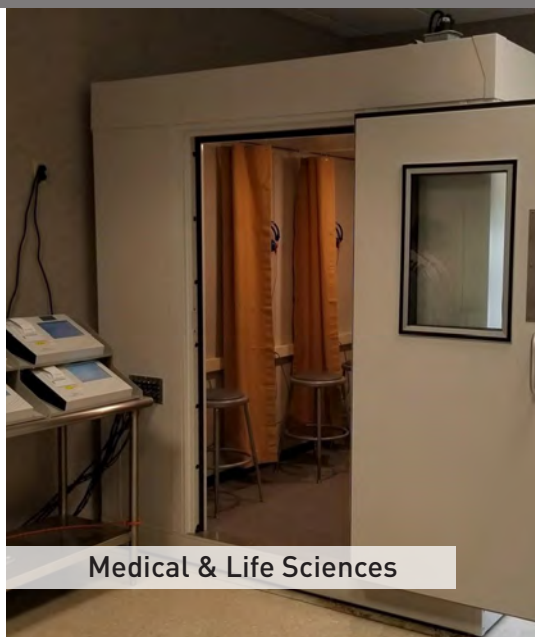
Noise-Lock Sentry Door Acoustic Performance

TYPE	Acoustic Rating		1/3 OCTAVE BAND CENTER FREQUENCY, HZ																		Test Report (Year)	THK Inches (mm)	WT lb/ft² (kg/m²)	Seals	
			63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150					4000
	STC	Rw	SOUND TRANSMISSION LOSS, DB																						
SWINGING DOOR	43	–	23	12	18	23	31	38	43	42	41	41	42	43	42	43	44	43	45	49	51	815-29-95 (1995)	1-3/4 (45)	8 (39)	a
	51	50	24	20	23	28	37	44	47	49	48	50	53	52	53	52	51	51	54	58	59	815-19C (1994)	2-1/2 (64)	9 (44)	b
	53	52	22	24	27	31	42	47	47	48	50	53	54	54	54	53	51	51	53	57	58	815-17 (1994)	2-1/2 (64)	11 (54)	b
	54	53	21	28	28	40	48	52	51	52	52	54	55	55	54	51	51	51	54	59	63	815-23h (1994)	3-1/2 (89)	16 (78)	b
	55	–	21	28	29	40	48	50	51	53	53	54	55	56	56	55	53	52	53	58	61	815-20L (1994)	3-1/2 (89)	16 (78)	b
	61	59	22	28	28	41	51	54	53	55	55	60	62	60	60	61	61	62	64	66	69	815-23G (1994)	3-1/2 (89)	16 (78)	c
	64	63	24	32	36	44	51	53	58	58	59	62	63	63	65	66	65	66	67	70	70	815-24 (1994)	5 (127)	18 (88)	d
FULL GLASS	52	–	22	22	29	36	41	40	43	44	49	50	50	52	53	53	54	56	56	58	62	1079-15-05 (2005)	2-1/2 (64)	16 (77)	b
	55	–	22	26	29	35	42	44	48	50	51	51	52	54	55	56	57	59	63	65	68	1079-19-06 (2006)	3-1/2 (64)	19 (92)	c
SLIDING	NIC		NOISE REDUCTION, DB																						
	54	–	–	–	–	45	45	45	45	49	49	49	52	52	52	60	60	65	65	65	63	72-0365-S (1984)	6 (152)	24 (118)	e
	62	–	–	–	–	47	46	51	55	57	59	56	59	64	63	63	>65	>65	>65	>65	>65	72-0732 (1990)	8 (203)	50 (245)	f

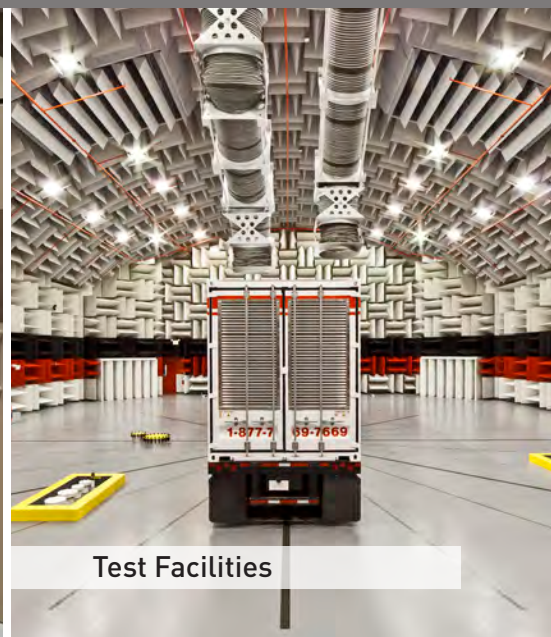
IAC Acoustics Seal System: **a)** single magnetic; **b)** double magnetic; **c)** magnetic tri-seal;
d) magnetic compression tri-seal; **e)** automatic pneumatic; **f)** automatic labyrinth compression



Architectural



Medical & Life Sciences



Test Facilities



Industrial



Dyno Test Rooms



HVAC