noisy office

Concentration Loss

loud voices

acoustics

distracting sound waves

high noise level stress

environmental pollution

noisy machines

healthy lifestyle

sound pollution

Class "A" Sound Absorption

airborne sound

Office noise pollution

hard surface echo

traffic noise impact

Protection

by ECO Manufacturing Ltd

Attention Deficiency

Echo, reflected sound waves

decibel

Stressfu environ

sound **absorption** attention loss decibel distraction

#### Five, Class "A" Sound Absorbing Screen Ranges

#### Tested by the Sound Research Laboratories Ltd.

- APS Range Premium acoustic performance with a heavy, modern profile. Ideal for environments where sound control is critical.
- Jubilee Range A beautiful design with enhanced finishes, bringing superb sound control to the working office environment.
- Smarty Plus A smart, high-performance desk divider with excellent sound control, a calming solution for dynamic open-plan work environments.
- D Range A versatile, metal-framed floor and desk screen system, perfect for high-traffic office spaces where good sound control is essential.
- E Range A cost-effective solution offering both floor and desk dividers, balancing form and function for adaptable office layouts, where good sound control is essential.

# APS NRC 2.80, Sound absorbing barriers screens

At ECO Manufacturing Ltd, we engineer Class "A" sound absorbing room panel screens, designed to meet the highest acoustic performance standards for commercial and office environments.

ECO partners with architects and interior designers to deliver Class "A" sound-absorbing room panel screens, engineered for seamless integration into contemporary interior designs while meeting the highest acoustic performance standards.



When strategically placed APS screens will greatly reduce office noise pollution.

### Jubilee NRC 2.60, Sound absorbing system

The Jubilee Range of desk & floor sound absorbing screens is a premium solution in acoustic screening, achieving the highest level of sound absorption with a Class "A" rating, with an impressive Noise Reduction Coefficient (NRC) of 2.60.

Designed by professionals with over 30 years of acoustic expertise, these screens effectively reduce office noise, promoting a quieter, more productive workspace.

This makes them an ideal choice for environments where controlling sound is essential, delivering superior noise reduction and enhancing overall workplace comfort.



One of the most important factors in creating a healthy office working environment is reducing sound pollution.

Minimising loud, distracting noises helps improve concentration and boosts overall efficiency.

Exposure to excessive noise from office equipment, ringing phones, and general background chatter can significantly contribute to stress & reduce employee well-being.

# Smarty Plus NRC 1.80, Specialist desk screens

The Smarty Plus Desktop Screens an innovative solution for noise reduction in office environments. The incorporation of several layers of acoustic materials within a 55mm thick screen is impressive in the amount of sound reduction, and noise pollution mitigation it achieves.

By employing multi-directional fiberboard and foam layers, the screens effectively reduce sound transmission each time sound passes through the screen.

Covering all edges in fabric not only prevents noise refraction but also adds a touch of aesthetics to the screens.



## D Range NRC 1.10, with effective noise control

The D range NRC 1.10 are an excellent solution for creating quieter, more work focused office environments.

Designed to effectively reduce noise pollution, making them ideal for offices where controlling sound levels is a priority.

With a robust 40mm thickness, these screens offer solid acoustic performance, and are available in both matching desk and floor standing versions

The linking system is engineered to connect the screens in 2, 3 or 4 way configurations simple and stable for long-term use.



### E Range NRC 1.10, Sound absorbing screens

The E Range of desk and floor screens, is a true workhorse, perfect for dividing workspaces or creating effective acoustic barriers in busy environments.

With Class "A" NRC of 1.10 sound absorption, these screens are engineered to significantly reduce workplace noise and enhance productivity.

Designed as a budget-friendly system, the E Range doesn't compromise on performance, but delivering premium acoustic control at an accessible price point.



At ECO Manufacturing Ltd, we engineer Class "A" sound-absorbing room panel screens, designed to meet the highest acoustic performance standards for commercial and office environments.

Sound absorption is quantified using the sound absorption coefficient, denoted by alpha (a). This value ranges from 0.00 to 1.00, where 0.00 indicates no absorption (complete reflection of sound), and 1.00 indicates total absorption of incident sound energy.

Materials achieving a coefficient of (a) = 1.00 fall within Class "A" — the highest standard of sound absorption performance.

Human speech general range										The main frequency range of human speech is between 150Hz to 5,000Hz															
The <b>RED</b> line is the test base line.	Base Line	10	<b>,</b> ⊥																						_
The <b>BLUE</b> area shows the amount of sound absorption of the APS screen.	APS screen	5	; -	_																					_
	APS screen	C	)  - ;	1 2	3	4	5	6	7	8	9	10	11	12	13 1	4 1	5 10	5 17	18	19	20	21	22	23	24
Reverberation	APS Test	4.43	4.27	6.35	5.45	5.11	4.35	4.02	3.54	3.05	2.95	2.69	2.41	2.35	2.35	2.26	2.1	1.95	1.75	1.56	1.36	1.15	0.88	0.74	0.58
Times in Seconds	Empty Room	4.65	4.30	7.10	7.37	6.05	6.42	6.57	6.63	6.51	6.22	5.46	4.91	5.02	5.50	5.44	5.01	4.62	4.09	3.28	2.65	2.10	1.48	1.19	0.84
Frenquency Hz		50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	1000
Practical Absorption Coefficients			N/A			0.60			1.00			1.00			1.00		1.00		1	1.00			N/A		
Weighted sound absorpti	on coeffic	ient	to	ISO	116	54. :	=1.0	0			Cla	ass	"A"		N R	C =	2.8	0	Т	est	dat	e 25	/11	/20	21

#### Weighted sound absorption coefficient to ISO 11654

APS acoustic barrier screens are ECO's highest-performing sound-absorbing room dividers, specifically engineered to reduce office noise pollution and enhance acoustic comfort in open-plan environments.

The internal core of the APS screen is engineered for exceptional sound absorption, incorporating a combination of acoustic fabric, high-performance foam, and low-density multi-directional fibre board.

Inside each screen, we use high-density mineral wool with non-directional fibres that effectively trap sound waves and vibrations as they pass through the barrier. This advanced acoustic core enhances performance with every layer of sound contact. The mineral wool is (Quiet Mark<sup>™</sup>) approved, ensuring it meets rigorous standards for noise reduction and acoustic wellbeing.

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