



Mineral

Fire reaction, Acoustic performance (see p.32), i-ceilings, Light reflectance (%), Humidity resistance (% RH), Cleanability, Anti microbial, Air quality, Scratch resistance, Impact resistance, Recycled content

		α_w	NRC	Dnc _w (dB)										
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Ultima/Optima

Ultima	A2-s1, d0	up to 0.70	0.75	up to 37	•	≈ 90	95	wipeable			•			< 70%
Ultima OP					•	≈ 90	95	wipeable						< 70%
Ultima dB	A2-s1, d0	up to 0.50	up to 0.50	up to 44	•	≈ 90	95	wipeable			•			< 70%
Optima	A2-s1, d0	up to 1.00	up to 1.00		•	≈ 95	95	wipeable			•			< 40%

Perla/Nevada

Perla														
Perla OP														
Nevada	A1	up to 1.00	up to 0.95	up to 28	•	≈ 80	95	washable						< 20%
Colortone Nevada	A2-s1, d0*	1.00	0.95				95	washable						< 20%

* except Colortone Nevada Metal: A2-s2, d0

Cirrus

Cirrus	A2-s1, d0	0.55 (H)	0.50	36		≈ 80	95	with dry cloth						< 70%
Cirrus 75	A2-s1, d0	0.70	0.75	38		≈ 80	95	washable						< 70%
Cirrus Design*	A2-s2, d0	0.55	0.55	36		≈ 80	70	with dry cloth						< 70%

* Step/Decade/Doric/Image/Synonyme/Contrast

Dune

Dune Supreme	A2-s1, d0	up to 0.55	0.50	35		≈ 80	99	with dry cloth						
Dune Max	A2-s1, d0	0.65	0.60	35		≈ 80	99	with dry cloth						< 70%
Dune dB			0.55											
Colortone Dune	A2-s1, d0	0.55	0.55	35		≈ 80	95	with dry cloth						< 70%

Plain

Plain	A2-s1, d0	0.15 (L)	0.15	37		90	95	with dry cloth						< 20%
Plain Design*	A2-s2, d0	0.15 (L)	0.15	36		90	70	with dry cloth						< 70%

* Graphis

Fine Fissured

Fine Fissured	A2-s1, d0	0.60	0.60	34	•	≈ 80	95	with dry cloth						< 40%
Frequency	A2-s1, d0	0.70	0.70	37	•	≈ 80	95	with dry cloth						< 70%
Fine Fissured Design*	A2-s1, d0	0.35	0.35	35		80	70	with dry cloth						< 40%
Colortone Fine Fissured Black	A2-s2, d0	0.60	0.60	34			95	with dry cloth						< 40%

* SecondLook/Sektor

Metal

Orcal Extra Microperforated (1)	A2-s2, d0	0.55	0.65	30	•	85	95	washable			•	•		< 40%
Orcal Microperforated (1)	A2-s1, d0	0.75	0.80	20	•	≈ 70	95	washable			•	•		< 40%
Orcal Perforated (1)	A2-s1, d0	0.70	0.70	20	•	≈ 75	95	washable			•	•		< 40%
Orcal Plain	A2-s1, d0	0.10	0.10	44	•	≈ 90	95	high pressure water cleaning (2)		ISO 3	•	•		< 40%
Orcal Premium	A2-s2, d0	up to 0.60(H)	0.60	up to 47	•	≈ 75	95	washable			•	•		< 40%
Orcal Bioguard Plain	A2-s1, d0	0.10	0.10	44	•	≈ 90	95	high pressure water cleaning (2)	anti-microbial	ISO 3 (3)	•	•		< 40%

Wood

Madera Veneers	B-S2, d0	up to 0.40(L)				≈ 60	70	with dry cloth						< 70%
Madera Laminates	B-S2, d0	up to 0.40(L)				≈ 74	70	with dry cloth						< 20%

(1) Typical values for product with fleece acoustic inlay. For other acoustic solutions, see metal technical pages.
 (2) Only for the Clip-In systems with silicone sealed joints.
 (3) All Orcal Plain products achieve ISO 3.

Specific Areas

Fire reaction, Acoustic performance (see p.32), i-ceilings, Light reflectance (%), Humidity resistance (% RH), Cleanability, Anti microbial, Air quality, Scratch resistance, Impact resistance, Recycled content

		α_w	NRC	Dnc _w (dB)										
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Bioguard Plain	A2-s1, d0	0.15	0.15	37		90	95	washable	Anti-bacterial	ISO 5				< 40%
Bioguard Acoustic	A2-s1, d0	0.60(H)	0.60	37		≈ 90	95	washable	Anti-bacterial	ISO 5				< 40%
Mylar	A2-s1, d0	0.10	0.10	36		80	95	washable		ISO 4				< 40%
Parafon Hygien	A2-s1, d0	0.95	0.95			≈ 85	95	high pressure water cleaning (system)		ISO 5				< 20%
Ceramaguard	A1	0.55	0.60	39		≈ 85	100	Scrubbable						< 40%
Newtonne	A2-s1, d0	0.10	0.10	37		≈ 85	100	washable				•		< 20%

Canopies

Ultima Canopy	A2-s1, d0	N/A	N/A	N/A		≈ 90	70	with dry cloth						
Infusions Canopy	*	N/A	N/A	N/A		N/A	70	washable						
Axiom Canopy	*	N/A	N/A	N/A										
Orcal Canopy	*													

* Please refer to product data page or contact ITS for further details.

Fire
 Building Regulations (where applicable) require that buildings meet appropriate Euroclass standards for fire reaction performance depending on the area of application. Armstrong products have been tested to the harmonised European fire reaction standards and meet the minimum performance criteria (see p.36).

Acoustics
 The occupant of a space, be it an office, a classroom, a shop, or any similar environment needs:
 - Intelligibility – to hear and to be understood
 - Privacy – to not be overheard
 - Concentration – to not be disturbed.
 The optimum acoustic climate will be obtained with the right combination of sound absorption and sound insulation, and can be supplemented by the use of active acoustics (see p.24).

Light Reflectance
 Light reflectance of a surface is its property of reflecting light. The measure of light reflectance is that fraction of the specified incident light which is reflected by the surface expressed as a percentage value.

Humidity resistance
 Ceiling installations are facing more and more demanding humidity conditions such as: fast track programmes, buildings with intermittent heating and cooling, areas with a high concentration of people, structures which are open to the exterior environment, etc. To meet these requirements Armstrong offer a wide range of products suitable for installation in conditions of up to 95% & 99% Relative Humidity, some of which excel in extreme conditions of up to 100% RH.

Cleanability
 The frequency and method of cleaning of a ceiling varies from one application to another, from cloth to high pressure water jet and including resistance to disinfectants for healthcare premises. See cleaning & maintenance details for full details.

Anti-microbial performance
 The control of bio-contamination is essential in the healthcare sector, especially in hospitals and clinics. Armstrong ceilings do not favour the development of fungi/mould or yeast and the products can be used in any general area. The Armstrong Bioguard paint reduces the colony size of virulent strains of bacteria, moulds and yeasts. This special paint finish can be cleaned and disinfected.

Air Quality
 Armstrong offers specific solutions to limit the number of airborne particulates in a clean room environment. These products are tested against ISO 14644-1.

Scratch Resistance
 Superior level of surface scratch resistance, evaluated with the Hess rake test.

Impact resistance
 Frequent ceiling tile removal, typically in areas where building service equipment is located, means that a higher level of impact resistance can be desired. In this category, the level of durability and impact resistance has been improved by Armstrong.

Recycled Content
 A significant proportion of our products are produced using particular recycled raw materials. They are indicated in our literature in accordance with ISO 14001:2001

10 YEAR guarantee
 Armstrong World Industries guarantees the Armstrong 95% RH products shall be free from sag* as a direct result of defects in materials or workmanship for 10 years from the date of installation of the material subject to the terms detailed opposite.
 * N.B. Maximum sag as defined in EN 13964.