



# CERATMOS®

DIFFUSION PANEL



SPHERICAL



Image of CERATMOS® S - spherical model (on the left).

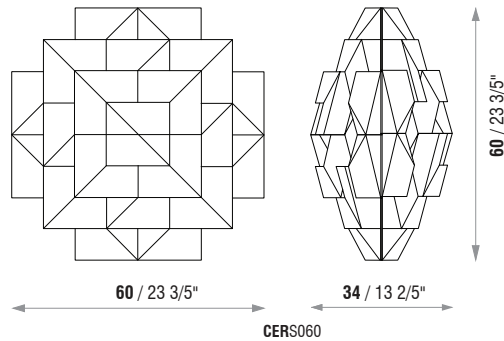
## DESCRIPTION

CERATMOS® is a spherical tridimensional diffusor especially dedicated to Audio Dolby Atmos control rooms. There are two versions of this model: spherical and half-spherical. The Spherical is meant to hang from the ceiling whereas the half-spherical is to be set on the surfaces of walls or ceilings. This device was designed to enhance the acoustic quality of a multi-source control room, like Dolby Atmos. It consists of a spherical shape with intricate surface patterns that evenly scatter sound waves in all directions. This diffusion process helps to minimize flutter echoes and standing waves, modal resonances and hot spots, by breaking up direct reflections and redirecting sound energy, thus promoting a more balanced and natural sound field. CERATMOS® leads to an improved sound division of each channel source clarity, definition, and spaciousness of audio. A reflected sound field from a convex spherical surface is unquestionably better than concave surfaces that cause several interferences. Jocavi has developed this model from the shape of a sphere, slightly ovalized to better adapt the scattering coefficient angles to the scale and size of control rooms. We adapted and segmented the curved shape of a sphere into small and flat elements, replacing the convex curved surface by small flat plans such as rectangles, trapezoids, and triangles, thus emphasizing and consequently better controlling the scattering factor. This segmentation positively influences the accuracy calculation of the focal point of incidence, i.e., of the sweet spot. This spherical diffusor has a wide scattering diffusion coefficient according to Dolby Atmos rooms' characteristics. Its depth results in a focused effect taking multi-source surround sound systems into account. CERATMOS® is consequently a secondary source that will radiate acoustic pressure to the receptor position, allowing it to form a larger hearing warhead in the position of the receptor (sweet spot), perfectly integrated with the several sound speaker sources. These strategically well positioned diffusors contribute to better distinguish the sound of each channel where accurate sound reproduction is crucial.

## FEATURES

- Dedicated to Audio Dolby Atmos
- to be hanged from ceilings
- larger hearing warhead in the sweet spot position
- Average diffusion: **0.68/m²** [ $>500\text{Hz}$ ;  $<5\text{KHz}$ ]
- NRC: **0.14/m²** [ $>250\text{Hz}$ ;  $<10\text{KHz}$ ].
- Fire-resistance: VO - UL94 standards
- Installation: accessories included.
- Manufactured in HIPS.
- 100% recyclable.

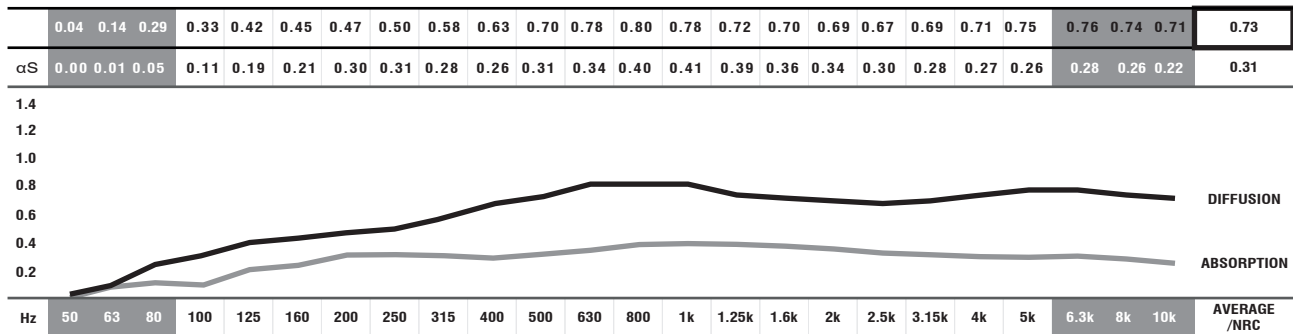
## TECHNICAL DRAWINGS



## MODELS AND SIZES

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
CERS060	60 cm (23 3/5")	60 cm (23 3/5")	34 cm (13 2/5")	5.3 Kg (11 lbs 1oz)

## DIFFUSION - ABSORPTION COEFFICIENT

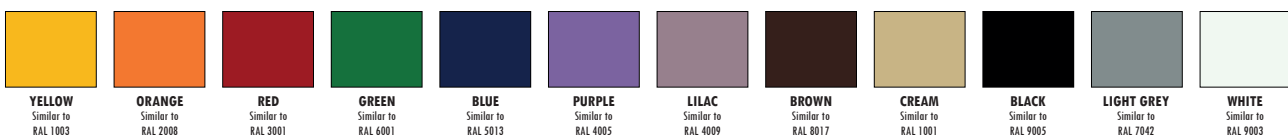


■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

■ Values [ $<100\text{Hz}$  and  $>5\text{K}$ ] are Non Standard Values.

■ DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

## STANDARD HIPS COLOURS



## IMPORTANT NOTICES

- JOCAVI® accepts no responsibility for any printing errors. Specifications can be modified without prior notice, if technical or commercial reasons so require.
- RAL® is an international independent colour standard system partner for industry, trade, architecture and design. Should be consulted before placing any order.
- The colours shown on this catalogue are only a reference and an illustration of the products finishing. The colours shown are not binding because brightness, contrast and colour balance may vary due to the printing process.
- Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
- Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



# CERATMOS® - W

DIFFUSION PANEL



HALF-SPHERICAL



Image of CERATMOS® H - half-spherical model (on the left).

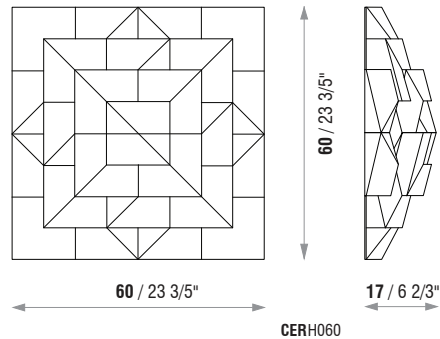
## DESCRIPTION

CERATMOS® is a half-spherical tridimensional diffusor especially dedicated to Audio Dolby Atmos control rooms. There are two versions of this model: half-spherical and spherical. The half-spherical is to be set on the surfaces of walls or ceilings whereas the Spherical is meant to hang from the ceiling. This device was designed to enhance the acoustic quality of a multi-source control room, like Dolby Atmos. It consists of a half-spherical shape with intricate surface patterns that evenly scatter sound waves in all directions. This diffusion process helps to minimize flutter echoes and standing waves, modal resonances and hot spots, by breaking up direct reflections and redirecting sound energy, thus promoting a more balanced and natural sound field. CERATMOS® leads to an improved sound division of each channel source clarity, definition, and spaciousness of audio. A reflected sound field from a convex spherical surface is unquestionably better than concave surfaces that cause several interferences. Jocavi has developed this model from the shape of a sphere, slightly ovalized to better adapt the scattering coefficient angles to the scale and size of control rooms. We adapted and segmented the curved shape of a sphere into small and flat elements, replacing the convex curved surface by small flat plans such as rectangles, trapezoids, and triangles, thus emphasizing and consequently better controlling the scattering factor. This segmentation positively influences the accuracy calculation of the focal point of incidence, i.e., of the sweet spot. This half-spherical diffusor has a wide scattering diffusion coefficient according to Dolby Atmos rooms' characteristics. Its depth results in a focused effect taking multi-source surround sound systems into account. CERATMOS® is consequently a secondary source that will radiate acoustic pressure to the receptor position, allowing it to form a larger hearing warhead in the position of the receptor (sweet spot), perfectly integrated with the several sound speaker sources. These strategically well positioned diffusors contribute to better distinguish the sound of each channel where accurate sound reproduction is crucial.

## FEATURES

- Dedicated to Audio Dolby Atmos
- to be set on the surfaces of walls or ceilings
- larger hearing warhead in the sweet spot position
- Average diffusion: **0.68/m²** [ $>500\text{Hz}; <5\text{KHz}$ ]
- NRC: **0.14/m²** [ $>250\text{Hz}; <10\text{KHz}$ ].
- Fire-resistance: VO - UL94 standards
- Installation: accessories included.
- Manufactured in HIPS.
- 100% recyclable.

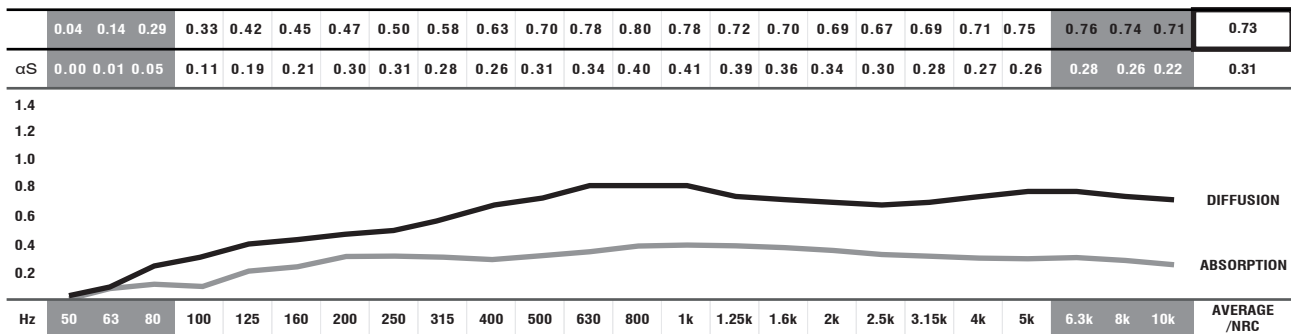
## TECHNICAL DRAWINGS



## MODELS AND SIZES

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
CERH060	60 cm (23 3/5")	60 cm (23 3/5")	17 cm (6 2/3")	4.3 Kg (9 lbs 8 oz)

## DIFFUSION - ABSORPTION COEFFICIENT

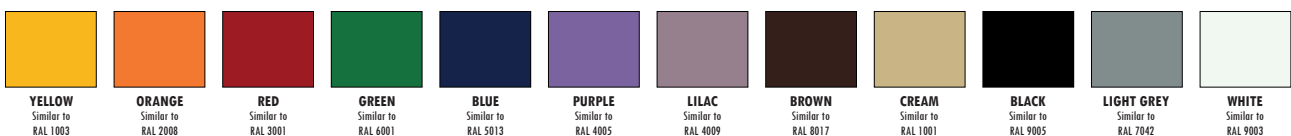


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