



# MELLOWCLOUD<sup>®</sup> DIF

SUSPENDED DIFFUSION PANEL



Image of Mellowcloud<sup>®</sup> DIF model Ref.:MELDIF applied (ambient image).

## DESCRIPTION

The MELLOWCLOUD<sup>®</sup> DIF is a One Dimensional Curved Shaped Diffuser Acoustic panel for Multipurpose, Auditoriums and Theatre Halls.

This is a product was devised to be suspended in ceilings or metal grids; it can be also used as fixed or motorized acoustic shells. This type of acoustic material is mainly applied in large area of application such as auditoriums, conference rooms, multipurpose rooms and airports, places where acoustic treatment with a modular continuous surface is required.

It is a diffuser material that also provides somewhat of homogenous sound spectrum absorption. The MELLOWCLOUD<sup>®</sup> DIF evolves and meets the aesthetic challenge, while also offering an optimal sound diffusion and absorption characteristics.

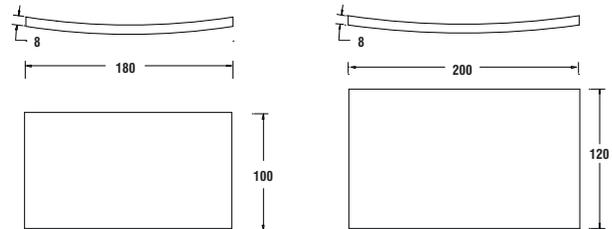
The architecture involves rectilinear and curvilinear lines. Flat rigid surfaces provide uneven sound pressure across the audience area. Shaping and curving the surfaces can improve the coverage of the sound diffusion; this will help the results, although it is a vast subject that requires its own tools of experimentation on case-by-case base for each project. MELLOWCLOUD<sup>®</sup> DIF provides architects and designers with wide latitude in curvilinear design.

MELLOWCLOUD<sup>®</sup> DIF can be customized as to its shape and size to better adapt to each space. Custom panels offer in a variety of types, sizes, ellipses, geometric shapes, vaults, acoustical domes, thicknesses, and finishes.

## FEATURES

- JCP<sup>®</sup> micro-fibers glass and reinforced gypsum and finishing.
- Average diffusion: **0.37/m<sup>2</sup>** [ $>100\text{Hz}; <5\text{KHz}$ ].
- NRC: **0.18/m<sup>2</sup>**.
- Fire-resistance: Euroclass A2-s1,d0 (similar to old M0).
- Standard and custom shapes.
- Optimized shape, arraying and positioning insures uniform coverage.
- Suspended using Integrated mounting hardware and cable system (only four supports/hangers by each panel).
- Very lightweight (4 Kg/m<sup>2</sup> - 80 mm thick panel)

## TECHNICAL DRAWINGS

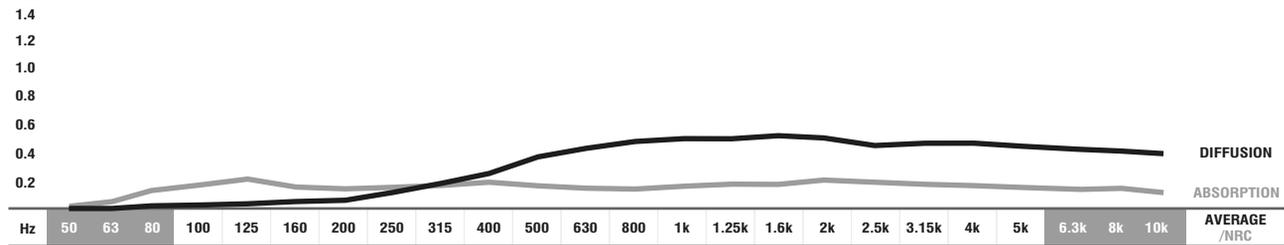


## MODELS AND SIZES

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MELDIF200	200 cm	120 cm	8 cm	14 Kg
MELDIF180	180 cm	100 cm	8 cm	9 Kg

## DIFFUSION - ABSORPTION COEFFICIENT

	0.00	0.00	0.01	0.03	0.04	0.06	0.07	0.12	0.19	0.25	0.38	0.43	0.47	0.49	0.49	0.51	0.48	0.45	0.47	0.47	0.46	0.44	0.42	0.41	<b>0.37</b>	
$\alpha_S$	0.01	0.07	0.15	0.19	0.21	0.18	0.16	0.17	0.19	0.20	0.18	0.16	0.15	0.17	0.19	0.19	0.21	0.20	0.19	0.18	0.17	0.16	0.17	0.15		0.18



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

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

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

## STANDARD FINISHING COLOURS



## IMPORTANT NOTICES

- JOCAVI<sup>®</sup> accepts no responsibility for any printing errors. Specifications can be modified without prior notice, if technical or commercial reasons so require.
- RAL<sup>®</sup> 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.
- Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
- Typical Indoor Comfort Standards state a temperature range of 20°C - 27°C (68°F - 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI<sup>®</sup> products' range.
- Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may slightly vary due to their production method and some inherent raw-materials characteristics.