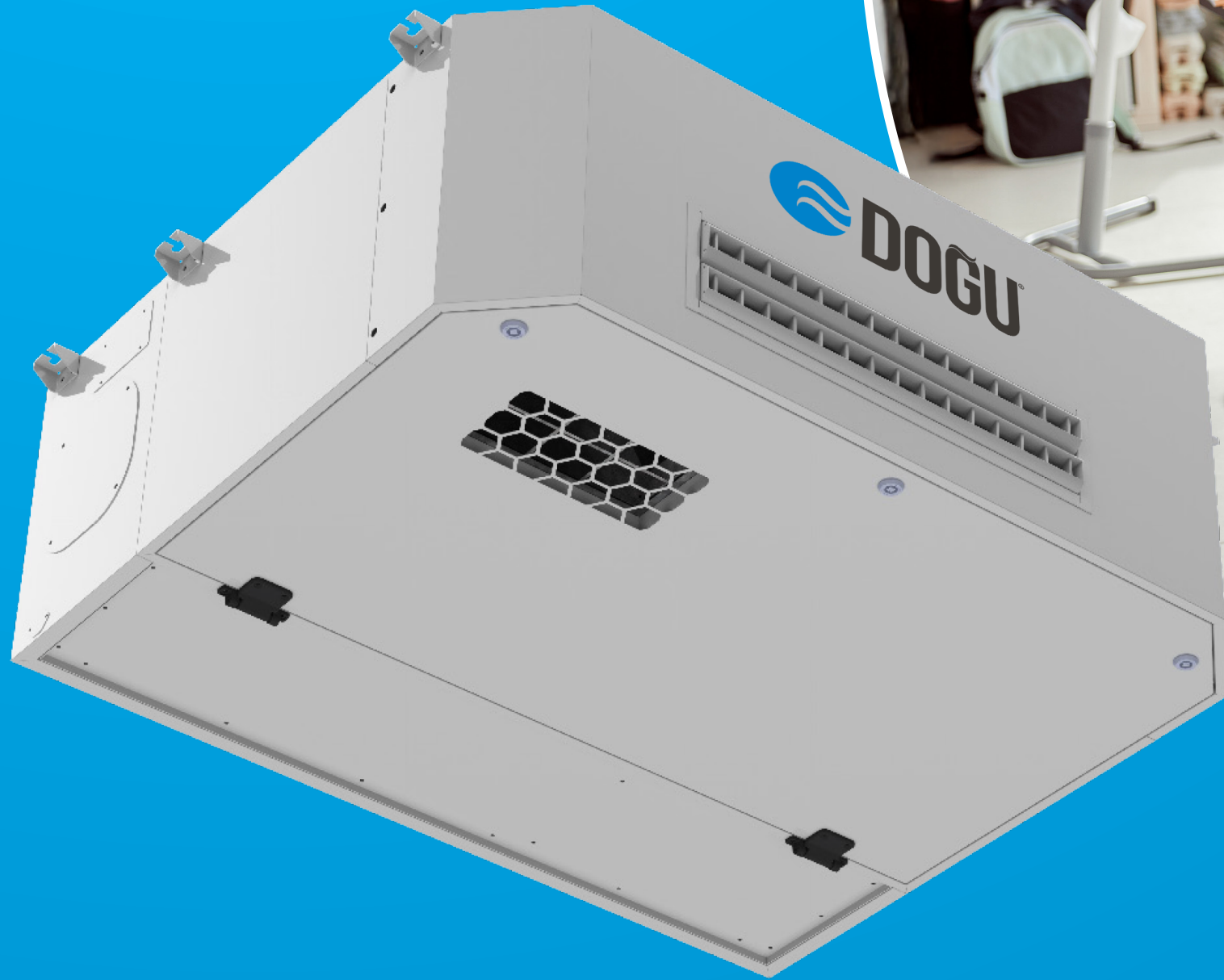


CLASSMATE

HRU FOR SCHOOL VENTILATION



DOĞU HVAC: INNOVATING TODAY SUSTAINING TOMORROW

HRU FOR SCHOOL VENTILATION

Classmate HRU for School Ventilation are high-efficiency ventilation solutions specifically developed for classrooms, meeting rooms, and offices where no existing ventilation infrastructure is available. Thanks to their compact design and energy-saving technology, these units significantly improve indoor air quality while minimizing energy costs.

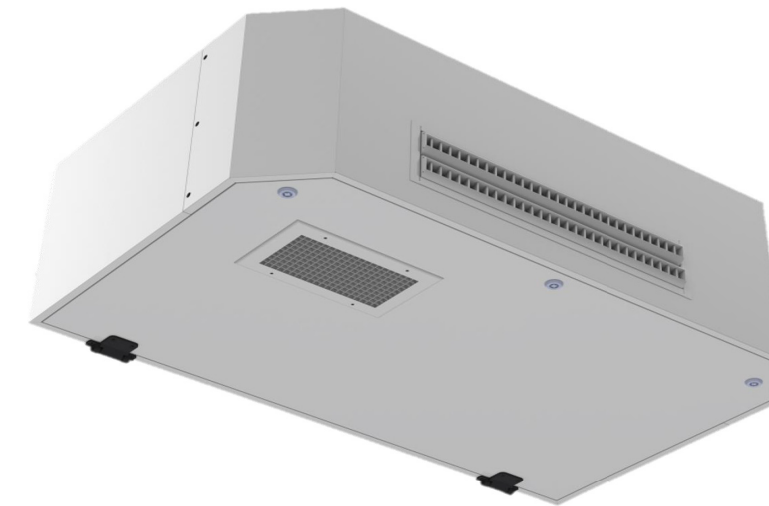
MATERIAL AND APPLICATION FEATURES

Classmate HRU for School Ventilation provide effective standalone ventilation without requiring duct connections, thanks to their built-in return air grille and specially designed supply air diffuser. Classmate series is available in three different models: 500, 1000, and 1500 m³/h, offering a wide airflow capacity range from 150 m³/h to 1500 m³/h. Each unit comes equipped with G4 (ISO Coarse) class filters as standard. Depending on user preference, the supply air line can be upgraded with high-efficiency filters such as M5, M6, F7, F8, or F9.

Additionally, with the optional CO₂ sensor, the unit can automatically adjust fan speed based on indoor carbon dioxide [ppm] levels, thus improving indoor air quality while optimizing energy efficiency.

Classmate series offers intelligent and efficient ventilation solutions, especially ideal for high-occupancy areas such as educational facilities.

FEATURES



- ⚙ Low Noise EC Plug Fans
- ⚙ High Efficiency Counter Flow Heat Recovery Exchanger
- ⚙ 100% By-pass Damper
- ⚙ 30 mm Rockwool Insulation + 20 mm Acoustic Insulation
- ⚙ ISO COARSE[G4] Class Filters in Blowing and Suction
- ⚙ Room Panel
- ⚙ Unit Control from Phone or Tablet
- ⚙ Modbus
- ⚙ Weekly Schedule Control

Optional Features:

- ⚙ Built-in Electric Preheater
- ⚙ Built-in Electric After Heater
- ⚙ CO₂ Sensor
- ⚙ Supply and Exhaust side ePM1 or ePM2.5 Filters
- ⚙ 2nd stage filter on the supply air side
- ⚙ Constant Flow
- ⚙ Fresh Air Intake-Exhaust Dampers

CLASSMATE

COMPONENTS

1 EC Plug Fans

High-efficiency, low-noise fans with integrated speed control. Used for circulating fresh and exhaust air. Their compact, integrated design ensures easy installation and maintenance while contributing to energy savings.

2 Electric Preheater-OPTIONAL

Ensures that the fresh air reaches the target temperature level. Provides frost protection at low outdoor temperatures, supporting system safety.

3 Electric Post Heater- OPTIONAL

Ensures that the supply air reaches the required comfort temperature. Located at the unit outlet to support precise temperature control of the air delivered to the occupied space.

4 Supply Air Diffuser

Thanks to its mechanical structure, it ensures that the air discharged from the unit is directed to the room in a controlled manner and at the desired airflow rate.

5 Filters

The G4-type ISO Coarse class filter located on the fresh air intake side of the unit captures dust and particles from the outdoor air, ensuring that cleaner air enters the system. The filter positioned on the return (room air) side protects the internal components of the unit from contamination, allowing the system to operate efficiently and with a longer service life.



6 Counter Flow Heat Exchanger

Transfers heat from the exhaust air to the incoming fresh air, providing energy savings. Operates based on the counterflow principle for high efficiency. Its aluminum plate structure offers durability and long service life.

7 Exhaust Duct Connection Spigot

Duct connection element that allows the extracted return air from the room to be discharged to the outdoor environment.

8 Fresh Air Duct Connection Spigot

It is the duct connection component that links the outdoor air intake to the unit and connects the conditioned air outlet of the unit to the supply duct delivering air to the room.

9 Condensate Drain Pump-Optional

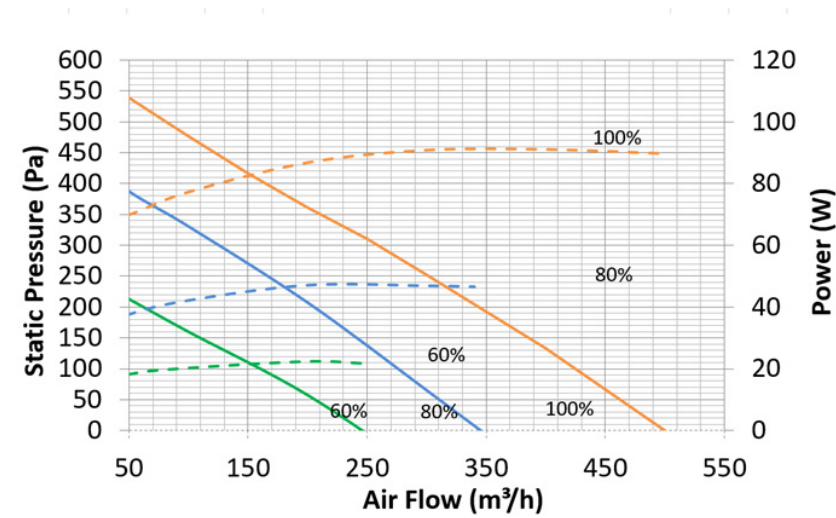
A compact and corrosion-resistant condensate drain pump can be optionally used to ensure safe removal of condensate generated in the unit.

TECHNICAL SPECIFICATIONS

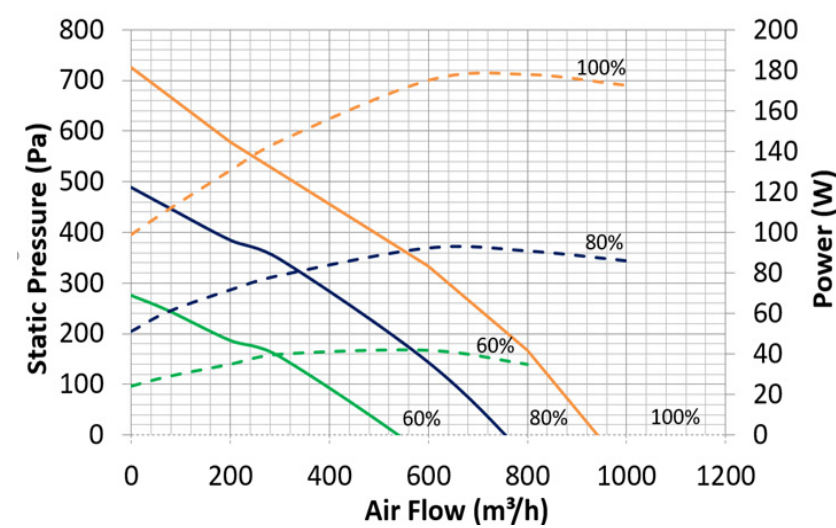
	Airflow [OPa/m³/h]	Power [W]	Volt[V] Current[C]	Sound Level dB[A]	SPI [W/m³/h]
CLASSMATE-05	500	166	230/1.5	30	0.166
CLASSMATE-10	1000	340	230/2.8	34	0.17
CLASSMATE-15	1500	770	230/5	32	0.24

PERFORMANCE CURVES

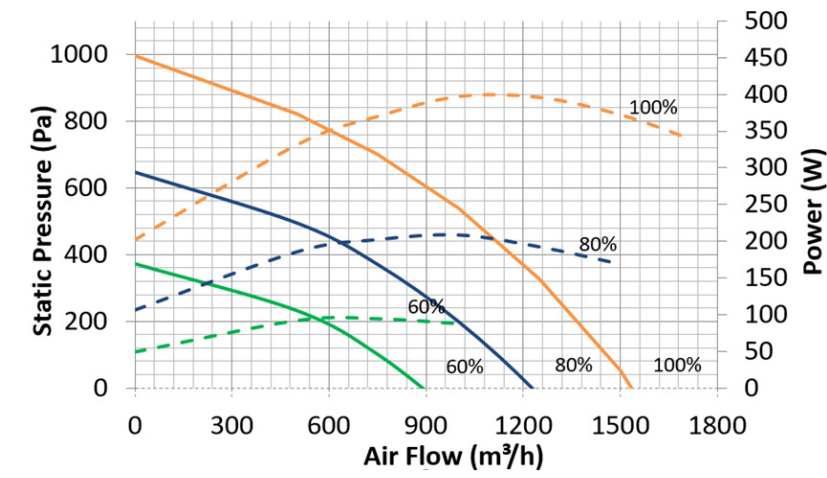
CLASSMATE-05



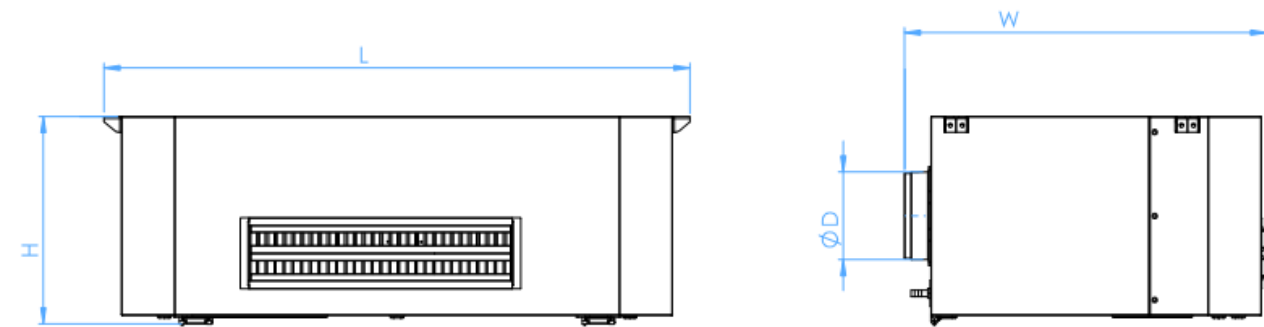
CLASSMATE-10



CLASSMATE-15

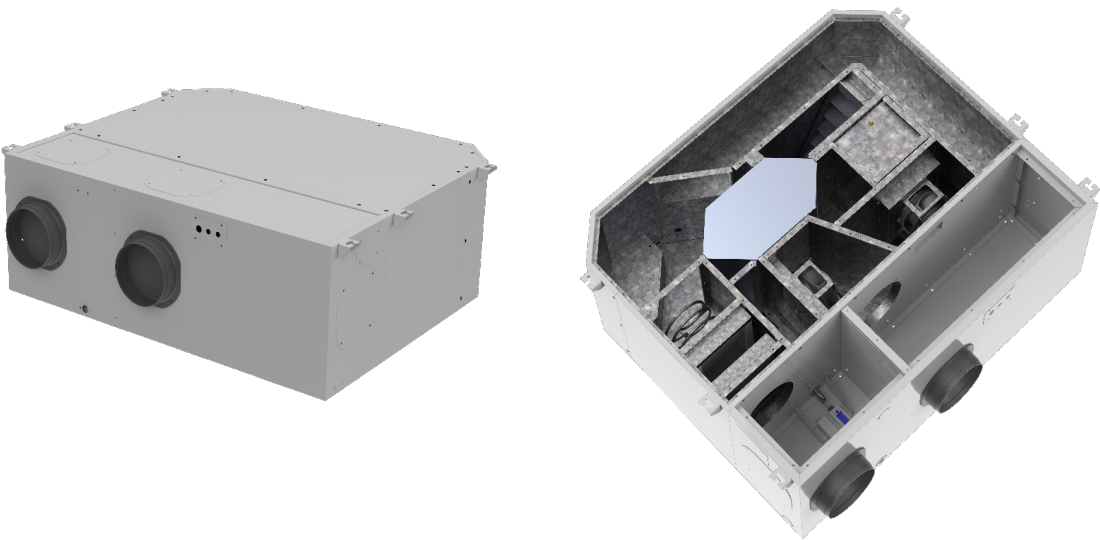


DIMENSIONS



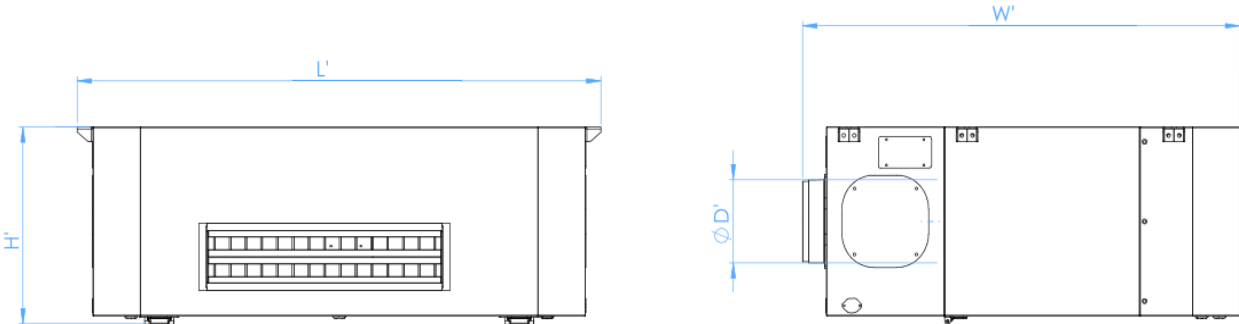
	L[mm]	W[mm]	H[mm]	D[mm]
CLASSMATE-05	1330	823	450	200
CLASSMATE-10	1600	1025	450	250
CLASSMATE-15	2005	1310	580	300

OPTIONAL AIRFLOW DIRECTION



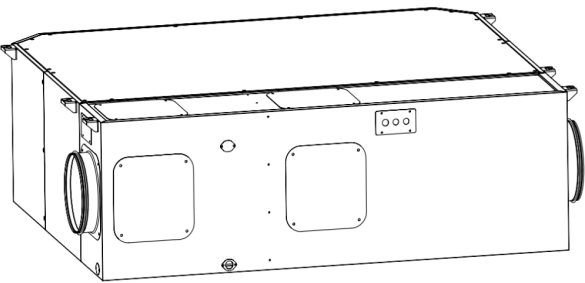
The optionally offered airflow direction module provides alternative duct connection orientations, offering installation flexibility and space efficiency.

DIMENSIONS WITH OPTIONAL AIRFLOW DIRECTION MODULE

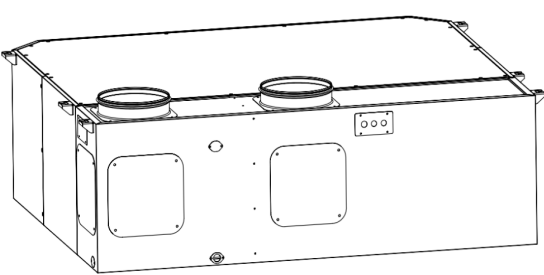


	L(mm)	W(mm)	H(mm)	D(mm)
CLASSMATE-05	1330	1110	469	200
CLASSMATE-10	1650	1419	519	247
CLASSMATE-15	2060	1939	570	312

DIRECTION OPTIONS



Airflow direction optional side connection.



Airflow direction optional top connection.

AUTOMATION OPTION

Operation	Description	Availability
On / Off	Can be operated by means of room control panel.	Standard
Display	On the screen of the room controller: fan speed can be adjusted, error/alarm information and temperature values are displayed.	Standard
Fan Speed Control	Unit Control by means of Phone or Tablet	Optional
Timer	The School unit can be scheduled by setting time and date by means of the room control panel. Thanks to the Timer program, it is possible to set non-working days (public holidays), and select different operating programs for each day of the week.	Standard
Modbus	School unit can be controlled by means of the Moodbus communication protocol	Standard
Filter Function	There are 2 methods to monitor filter contamination: 1: The unit records the operating time and gives a warning on the control panel for filter replacement when the set time is reached. 2: Filter replacement time can be monitored mechanically via a pressure switch. Thus, the control panel gives a warning when the filter needs to be changed. This is optional.	Standard
Control and Sensor	CO ₂ , differential pressure, temperature and humidity sensors are available upon request.	Optional

OPTIONAL INTERNAL ELECTRIC PRE-HEATER AND POST-HEATER

	Electric Pre-Heater	Electric Post-Heater
CLASSMATE-05	3 kW-1 step	1.5 kW
CLASSMATE-10	4.5 kW-1 step	3 kW
CLASSMATE-15	6 kW-1 step	4.5 kW

AUTOMATION OPTION

- ☞ Temperature can be monitored on the screen.
- ☞ Control feature via the app.



DOGU IOT Touchscreen



DOGU Graphic Display



DOGU IOT Pro

SUSTAINABILITY SOLUTIONS AT DOGU HVAC



We offer supplementary health insurance to our employees to promote healthy living. We also plan health-focused initiatives such as smoking cessation programs.



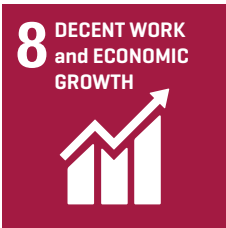
Through the DOGU HVAC CLUB project, we organize technical tours of our factory, participate in career events, and provide sponsorships to support the skill development of university and technical high school students.



In 2024, we increased female employment in our administrative and production departments. This step aims to contribute to gender equality by offering a workplace with equal rights for all employees.



Our R&D center's 2,500 m² solar panels and 0.6 MW annual capacity solar energy systems reduce our carbon footprint. We generate our electricity, ensuring a reliable, sustainable, and accessible clean energy source.



Decent Work and Economic Growth: As an employer brand, our primary goal is to protect our employees' rights and create a workplace founded on equality and justice for all employees.



We enhance indoor air quality with environmentally friendly and energy-efficient products, ensuring adherence to European standards.



We minimize waste through lean production policies and emphasize recycling, simultaneously increasing efficiency in our production processes.



We support environmental protection through our eco-friendly, sustainable, energy-efficient product lines and R&D efforts focused on reducing waste that could contribute to climate change.



We value transparency and accountability, working with associations like ISKAV to prevent corruption and unfair competition, aligning with sectoral ethical values.



Venues Breathe With Us



Scan to watch our
promotional video

