

HVAC Information for Planning

Project:	Witchford College	Job no:	305133
Client:	Cambridgeshire County Council	Date:	05/12/2023

AHU Design Technical specification



Project: Witchford College AHU Selection (799933b)
Unit name: 1 - Sports Hall AHU - Sports Hall AHU - Design data

Date: 29/11/2023
35 / 1.0.20231004.1111558
Unit ID: AD-10001599589

Sound power emitted to surroundings, measured according to ISO 3741

Frequency band	63	125	250	500	1k	2k	4k	8k	All		
To supply air duct	74	63	55	48	38	42	55	60	dB	61	dB(A)
To outdoor air duct	69	62	52	32	17	19	30	38	dB	49	dB(A)
To extract air duct	69	62	53	32	17	20	34	42	dB	50	dB(A)
To exhaust air duct	74	63	55	48	38	42	55	60	dB	61	dB(A)
To surroundings	74	66	59	63	48	47	44	47	dB	61	dB(A)

1 Filter

Filter class ePM10 60% (M5)

2x(592x592x520-10), 2x(592x287x520-10), 1x(287x592x520-5)

Velocity in the filter section

1.87 m/s

Recommended design pressure drop

62 Pa

Initial pressure drop

31 Pa

Final pressure drop

92 Pa

Dimensioning data	1 - Sports Hall AHU
Unit size	030
Air density	1.200 kg/m ³
Supply air flow	2.500 m ³ /s



Raising the standards in Air Conditioning Distribution

Toshiba Air Conditioning
Data Sheet

GM2241AT8-E1
OUTDOOR UNIT



Sound	Pressure High - Medium - Low	dB(A)	58 - 60
	Power High - Medium - Low	dB(A)	76 - 76