TECHNICAL NOTE

Project:	TE1609 New Classroom – Ingfield Manor School, Five Oaks
Client:	Ingfield Manor School
Date:	01/02/24 **(Revision 3 03/09/24)**
Author:	Robert Spriggs (01225 303523)
Title:	Water Neutrality Statement

Introduction

1. This Technical Note forms the Water Neutrality Statement prepared for a planning application for a new classroom at Ingfield Manor and in response to the Validation Letter from Horsham District Council Planning Department of 18th December 2023 in which it was stated:

    1. *Please provide a Water Neutrality Statement to support this application. Details of what is required can be found on the Horsham District Council website.*

2. It is our understanding that as the site is located within the Sussex North Water Supply Zone, and as an application that will create demand, a Water Neutrality Statement that sets out the existing and proposed consumption figures for the scheme and how water neutrality can be achieved is required.

Background

3. There are no changes proposed to the school as part of this application other than the installation of the new modular classroom to replace a demolished building.

4. The planning application for the site is to consist of a new modular class room which is located within the central area of the school (see Figure 1). This replaces an existing single storey building which has been demolished. The modular classroom was fabricated off-site and transport to the school for installation. The new classroom will provide additional capacity at the school for those students that are on the Woodview Pathway. This provides provision for children with social and communication special educational needs. The provision is currently for year 7 but the new classroom will also offer provision for year 8.

5. An elevation of the new classroom is shown in Figure 2 and a plan view in Figure 3.

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REGISTERED IN ENGLAND & WALES NO. 6719513



Figure 1: Location of new classroom

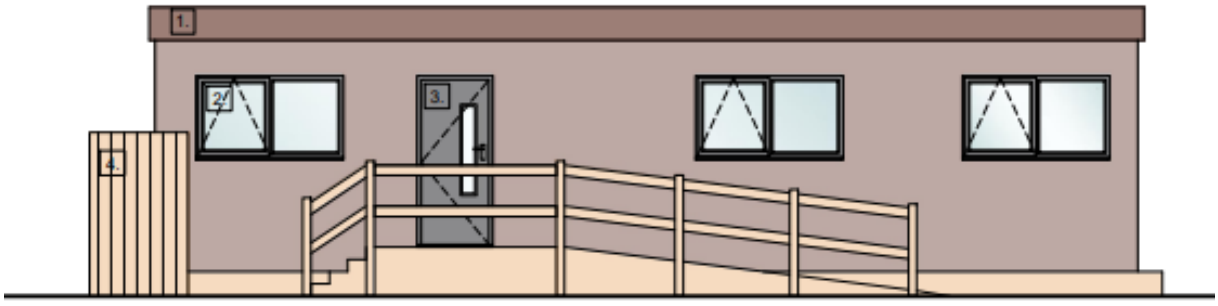

Figure 2: Image of proposed modular classroom

6. In plan view, the classroom layout shown in Figure 3 has been annotated to show those parts of the development that will consume water. These are two toilets and two wash basins. In addition, there is a kitchenette with a wash basin.

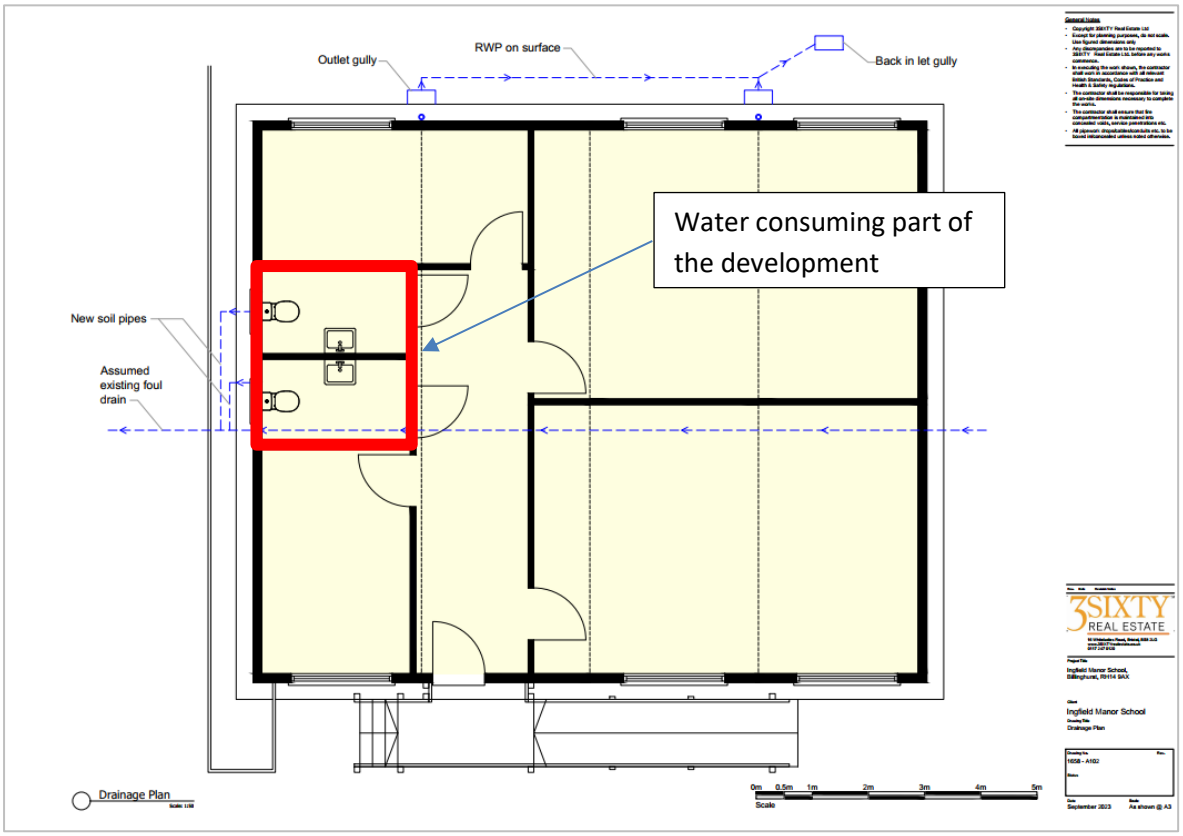

Figure 3: Classroom – plan view (source: 3Sixty Real Estate)

7. The difference between the current use and the proposed use is shown in Table 1. This shows that the proposed classroom represents a small increase in gross floor area (GFA) at the school overall.

Existing GFA (demolished)	Proposed GFA (modular)	Net Difference
Approx. 60sqm	120sqm	+60sqm

Table 1: Summary of GFA for existing and proposed use

Baseline Calculations

8. The approach to understanding water consumption is twofold; firstly the water bills have been obtained for the school from their utility service provider for the most recent 7 months from June to December 2023 (at the time of writing). Secondly, the BREEAM WAT 1 Water Efficiency Tool has been used and applied to the classroom description.

9. For the water bills that have been obtained, the usage has been recorded and is summarised in Table 2 below. Copies of the water bills can be provided on request.

10. The table under column 'Potable Water>Volume' shows the usage of water for the entire school between June and December. The new classroom did not come into operation until the Autumn term which began in September. So the water consumption for the new classroom is included in the water bills from September onwards. Furthermore, there were periods when the school was on holiday, the dates of which were:

- Spring term – ends 25th July
- Autumn Term:
    - 6th September to 23rd October
    - 27th October to 15th December

Date (2023)	Potable Water				Foul Water			
	Start Reading	End Reading	Volume(m^3)	Average daily (m^3)	Start Reading	End Reading	Volume(m^3)	Average daily (m^3)
June	79907	80268	361	12.03	79907	80268	361	12.03
July	80268	80641	373	12.03	80268	80641	373	12.03
August	80641	81014	373	12.03	80641	81014	373	12.03
September	81014	81375	361	12.03	81014	81375	361	12.03
October	81375	81748	373	12.03	81375	81748	373	12.03
November	81748	82109	361	12.03	81748	82109	361	12.03
December	82109	82482	373	12.03	82109	82482	373	12.03

Table 2: Summary of water bill usage records

11. It can be seen from the table that the volume of potable water used (in cubic metres) fluctuates between 361m^3 and 373m^3 (this is also shown graphically in Figure 4). Other than this there is no discernible difference between term time and school holidays. Also there is no discernible difference from when the new classroom was brought into operation in September.

12. The average daily volume of water usage is a fixed amount estimated by the utility service provider and is given at 12.03m^3 per day.

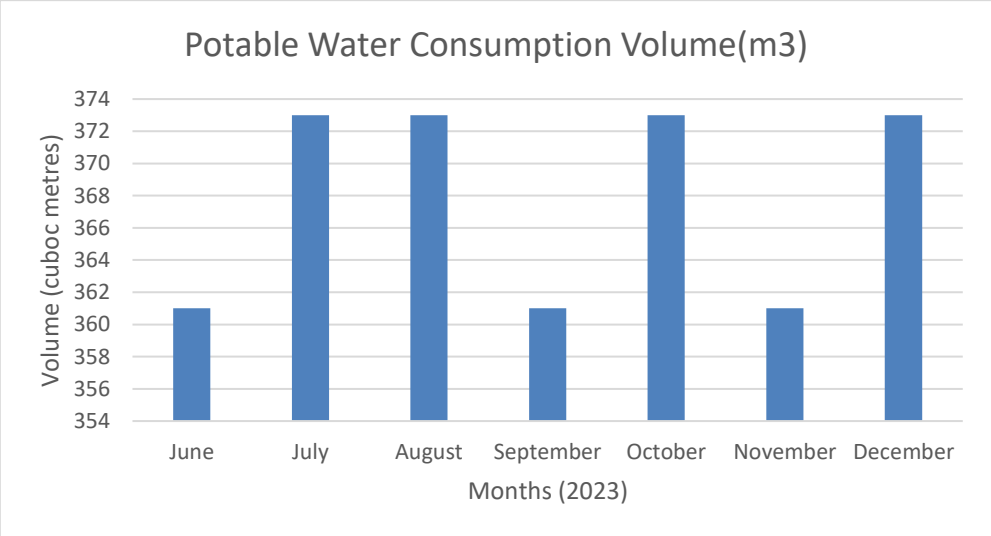

Figure 4: Ingfield Manor School monthly water consumption (source: WaterPlus Utility Provider)

13. Additional water bills covering the period March 2021 to January 2024 are submitted under separate cover.

14. Using the BREEAM Wat 1 Water Efficiency tool (see Appendix A), the predicted water

usage has been calculated using the building type as 'Education' and accepting the default values for building occupancy, days and hours of operation. The toilet consumption is taken from Building Regs Part G Table 2.1, which states that a WC dual flush maximum consumption of 6/4 litres for a dual flush and 4.5 litres for a single flush.

15. The tool forecasts that for the two toilets and wash basins, and a tap in the kitchenette, that 12.00 litres/ person/ day will be consumed, the equivalent of 0.012m³ per person/ day. For a class of 25, this would represent 300 litres/ day (0.3m³ / day). Using the average daily usage provide by the service provider of 12.03 m³/ day, this represents 2.5% of the school's overall usage per day.

16. Overall, the water usage associated with the additional classroom is very small and likely to be less than the daily variation in water usage by the school as a whole. The impact on the Sussex North Water Supply Zone would be considered unmeasurable. However, in order to demonstrates water neutrality, offset measures have been identified to reduce water usage elsewhere in the school. This is set out below.

Water Reduction Measures

17. The new classroom uses modern toilet and basin appliances. The toilets are type approved by the Water Regulations Approval Scheme (WRAS) to BS EN997, Class 2. This relates to the integral water trap and the cistern flushing volume.

18. The details of the package for all the washroom components are provided in Appendix B.

19. As a modular unit that was construction off-site, the classroom was not manufactured with any specific water re-use systems such as grey water harvesting. However, its relatively low usage combined with modern washroom components means that it will have an imperceptible impact on the water supply.

Offset

20. In order to offset the new classroom, water consumption facilities elsewhere in the school have been identified that can be upgraded to save on water usage. The facilities identified are shown on the plan at Figure 5. This location is at the north side of the school.

21. At this location there are 3 toilets and associated hand wash basins.

22. The facilities serve an area that includes two classrooms, a workspace, receptions rooms and offices. The facilities are used by students and staff. It is estimated that 46 people could be using these facilities.

23. The facilities are part of an older building at the school and therefore efficiencies could be made to the various toilet and hand wash basins. The BREEAM Wat 1 assessment below uses the same consumption rates and efficiencies made as for another classroom

development at the school in a report undertaken by H20Geo[1].

24. In addition, the new classroom replaced an old shed that had an outside tap. This was regularly used by the school ground's staff. This tap is no longer used and therefore it has been included in the offset although its contribution is relatively minor.

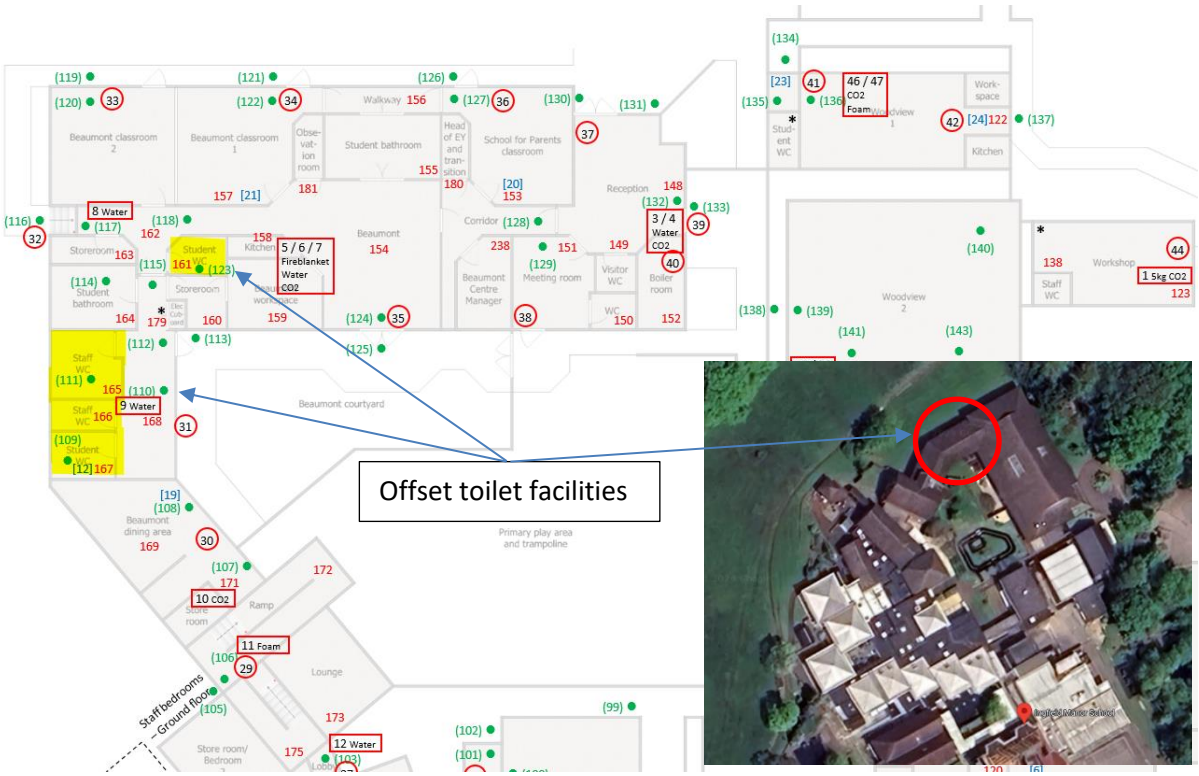

Figure 5: Location of offset facilities

25. The BREEAM Wat 1 assessment tool results for the offset facilities is shown in Appendix A. The results of the BREEAM assessment for the new classroom and the offset facilities is shown in Table 3.

26. The table shows that the new classroom water consumption is forecast to be 300 litres/ day.

27. The offset facilities are forecast to consume 845 litres/ day. This includes the outside tap associated with the old shed. After efficiency upgrades and removal of the outside tap to the old shed, these facilities are forecast to consume 538 litres/ day. This is a water consumption saving of 845 – 538 = 307 litres/ day. This is greater than the new classroom's water consumption thereby demonstrating water consumption neutrality.

[1] Water Neutrality Statement for the Proposed Development of Temporary Classrooms at Ingfield Manor (H20Geo, 2024 Ref: 20240416P1)

	Water usage		
	Development	Offset	
	Proposed	Current	With efficiencies
Toilets (l per flush)	4	6	3.75
WHBs (l/min)	3.6	9.5	5
Showers (l/min)			
Bath (l per fill)			
Kitchen tap (l/min)	10		
Kitchen rinse (l/min)			
Outdoor tap (l/min)		10	0
Modelled (l/person/day)	12	18.36	11.7
TOTAL (l/day)	300	845	538
Building Occupancy (persons)	25	46	46

Table 3: BREEAM Wat 1 Assessment - Summary

Cistern Displacement Device

28. As specific measures to the offset facilities, units could be replaced with more efficient ones or retro-fitted with new parts. There are many manufacturers that offer toilet facilities aimed at education establishments. An example provider is shown in the NBS Specification in Appendix C (for use as an example only). The units described are summarised below:

Fixture	**Company (or similar approved)**	**Fixture Range**	**Water Consumption**	**Units**
Dual Flush Mechanism WC	Armitage Shanks	Contour 21 Splash Schools	4.5/3	Litre per flush
Wash Hand Basins	Armitage Shanks	Contour 21 Splash Schools	4	Litre per minutes

Table 4: Example efficient toilet facilities

29. Details of the Armitage Shanks range for schools in contained in Appendix D.

30. As a general measure, cistern displacement devices could be placed in other toilets around the school. Examples include small bags filled with crystals that expand to reduce water usage by up to 1.2 litres for every large flush. These could be used at selected toilet blocks around the school, perhaps were current usage is very high and regular low volume flushes will still maintain the self-cleansing requirements of the system.

Conclusion

31. This Technical Note represents the Water Neutrality Report submitted in support of the planning application for a new modular classroom at Ingfield Manor School. The classroom replaces a previous building that was demolished, and represents a net increase in floor area of 60sqm.

32. Water bills obtained from the school's utility service provider show that the consumption of water did not change following the occupation of the new classroom thereby indicating that the new classroom represents only a fraction of the daily water usage of the school. As such, the usage is likely to be less than that of the daily variation in water usage for the whole of the school.

33. The BREEAM Wat 1 Water Efficiency tool has been used to forecast daily water usage for the classroom. The forecast results indicate that the classroom represents approximately 2.5% of the usage of the rest of the school.

34. Offset water consumption facilities elsewhere in the school have been identified. Upgrading these facilities will offset the water consumption in the new classroom thereby demonstrating water neutrality.

35. Overall, the water usage of the new classroom is very low and represents only a small fraction of the schools overall water usage. As a result, and alongside the offset facilities, its impact on the Sussex North Water Supply Zone will be negligible.

Appendix A

BREEAM Wat 1 Tool Results – New Classroom

BREEAM 2018 Wat 01 Water consumption: Water efficiency calculator for new non domestic education buildings

BREEAM® UK delivered by bre

Building type	Description of building type	Default building occupancy	Default annual days/operation	Default daily hours of operation
Education - secondary school or academy	Non-residential secondary schools, academies and all-age range schools	32	195	10

Main building activity areas	Description of activity area	Activity area present in building?	Net Floor Area (m^2)
Education - Classroom areas	Include basic classroom areas only. Exclude halls, specialist practical classrooms, i.e. ICT, and learning resource/library areas.	Yes	60
Education - Staff office and adminstration areas	Cellular or open plan office space, including staff rooms and staff kitchen where present/adjacent and reception areas (including library reception desk areas if present). Exlcudes meeting rooms, visitor waiting or circulation areas and other such spaces not permanently occupied.	No	
Education - Common room	Student common room.	No	
Education - dining area	Seated dining areas that accompany a permanently staffed kitchen preparing food for consumption on the premises (excludes small un-staffed kitchen's used by staff to re-heat food, make tea etc.)	No	
Education - Changing facilities with showers	Changing facility with showers to be used by pupils	No	

Water consumption - building microcomponent

WC component - all activity areas	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
WC - male (no urinals installed)	Effective flush volume (Litres)	4.00	2.13	1.00	4.26
WC - female	Effective flush volume (Litres)	4.00	2.10	1.00	4.20

Urinal component - all activity areas	units	Specification	No. of cisterns	Flushing frequency (flushes/hour)	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
Taps components (personal hygiene) - all activity areas					
Wash hand basin taps	Flow rate (litres/min)	3.60	2.13	0.25	1.30
Shower use	Flow rate (litres/min)		0.002	5.60	0.00
Fixed use - vessel filling	Litres/person/day	-	-	-	1.97
Tap components (cleaning) - staff kitchenette					
Kitchen taps - kitchenette	Flow rate (litres/min)	10.00	0.0600	0.67	0.27
Dishwasher	Litres/cycle		0.0026	1.00	0.00
Tap components (cleaning and food preparation) - school canteen food preparation area					
Fixed use - food preparation		-		-	0.00
Fixed use - kitchen cleaning		-		-	0.00

	Microcomponent consumption (L/person/day)
Total	12.00

BREEAM Wat 1 Tool Results – Offset facilities (current)

BREEAM 2018 Wat 01 Water consumption: Water efficiency calculator for new non domestic education buildings

BREEAM® UK delivered by bre

Building type	Description of building type	Default building occupancy	Default annual days/operation	Default daily hours of operation
Education - secondary school or academy	Non-residential secondary schools, academies and all-age range schools	32	195	10

Main building activity areas	Description of activity area	Activity area present in building?	Net Floor Area (m^2)
Education - Classroom areas	Include basic classroom areas only. Exclude halls, specialist practical classrooms, i.e. ICT, and learning resource/library areas.	Yes	60
Education - Staff office and adminstration areas	Cellular or open plan office space, including staff rooms and staff kitchen where present/adjacent and reception areas (including library reception desk areas if present). Exlcudes meeting rooms, visitor waiting or circulation areas and other such spaces not permanently occupied.	No	
Education - Common room	Student common room.	No	
Education - dining area	Seated dining areas that accompany a permanently staffed kitchen preparing food for consumption on the premises (excludes small un-staffed kitchen's used by staff to re-heat food, make tea etc.)	No	
Education - Changing facilities with showers	Changing facility with showers to be used by pupils	No	

Water consumption - building microcomponent

WC component - all activity areas	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
WC - male (no urinals installed)	Effective flush volume (Litres)	6.00	2.13	1.00	6.39
WC - female	Effective flush volume (Litres)	6.00	2.10	1.00	6.30

Urinal component - all activity areas	units	Specification	No. of cisterns	Flushing frequency (flushes/hour)	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
Taps components (personal hygiene) - all activity areas					
Wash hand basin taps	Flow rate (litres/min)	9.50	2.13	0.25	3.42
Shower use	Flow rate (litres/min)		0.002	5.60	0.00
Fixed use - vessel filling	Litres/person/day	-	-	-	1.97
Tap components (cleaning) - staff kitchenette					
Kitchen taps - kitchenette	Flow rate (litres/min)	10.00	0.0600	0.67	0.27
Dishwasher	Litres/cycle		0.0026	1.00	0.00
Tap components (cleaning and food preparation) - school canteen food preparation area					
Fixed use - food preparation		-		-	0.00
Fixed use - kitchen cleaning		-		-	0.00

	Microcomponent consumption (L/person/day)
Total	18.36

BREEAM Wat 1 Tool Results – Offset facilities (with efficiencies)

BREEAM 2018 Wat 01 Water consumption: Water efficiency calculator for new non domestic education buildings

BREEAM® UK delivered by bre

Building type	Description of building type	Default building occupancy	Default annual days/operation	Default daily hours of operation
Education - secondary school or academy	Non-residential secondary schools, academies and all-age range schools	32	195	10

Main building activity areas	Description of activity area	Activity area present in building?	Net Floor Area (m^2)
Education - Classroom areas	Include basic classroom areas only. Exclude halls, specialist practical classrooms, i.e. ICT, and learning resource/library areas.	Yes	60
Education - Staff office and adminstration areas	Cellular or open plan office space, including staff rooms and staff kitchen where present/adjacent and reception areas (including library reception desk areas if present). Exlcudes meeting rooms, visitor waiting or circulation areas and other such spaces not permanently occupied.	No	
Education - Common room	Student common room.	No	
Education - dining area	Seated dining areas that accompany a permanently staffed kitchen preparing food for consumption on the premises (excludes small un-staffed kitchen's used by staff to re-heat food, make tea etc.)	No	
Education - Changing facilities with showers	Changing facility with showers to be used by pupils	No	

Water consumption - building microcomponent

WC component - all activity areas	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
WC - male (no urinals installed)	Effective flush volume (Litres)	3.75	2.13	1.00	3.99
WC - female	Effective flush volume (Litres)	3.75	2.10	1.00	3.94

Urinal component - all activity areas	units	Specification	No. of cisterns	Flushing frequency (flushes/hour)	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
Taps components (personal hygiene) - all activity areas					
Wash hand basin taps	Flow rate (litres/min)	5.00	2.13	0.25	1.80
Shower use	Flow rate (litres/min)		0.002	5.60	0.00
Fixed use - vessel filling	Litres/person/day	-	-	-	1.97
Tap components (cleaning) - staff kitchenette					
Kitchen taps - kitchenette	Flow rate (litres/min)	0.00	0.0600	0.67	0.00
Dishwasher	Litres/cycle		0.0026	1.00	0.00
Tap components (cleaning and food preparation) - school canteen food preparation area					
Fixed use - food preparation		-		-	0.00
Fixed use - kitchen cleaning		-		-	0.00

	Microcomponent consumption (L/person/day)
Total	11.70

Appendix B

Classroom Water Components







Compare | Compare variants

I.Care DOCM L/L Pack - WC Pack

Verified by manufacturer 3 months ago

1900R.L.L.B - i.Care DOCM L/L Lever Handle with Rimless WC Pan (Blue rail & Seat)

Variant:

1900R.L.L.B - i.Care...

Doc M WC pack with cistern and WC pan.

Jump to:

Specification data

BIM objects

Add to spec

Download BIM

NBS BIM

+44020 3697 1787

Website

Contact manufacturer

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Got it

WC seats	Polypropylene, blue.
Washbasins	-
Material	Ceramic.
Handrails	Steel, blue.
Water supply fittings	Lever-operated thermostatic mixer tap.
Water supply temperature (maximum)	90°C.
Integral accessories	1902.00 - Sink. 1924.B - Toilet roll holder. 1923.B.800 - Arm rest. 1918 - Tap. 1919/ 1920 - Trap and waste.
Automation	Manual, lever handle.
Cistern capacity	6 L.

BIM objects

NBS BIM object standard

This BIM object has been authored to meet the requirements of the NBS BIM object standard.

Find out more about the NBS BIM object standard.

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Cistern.

Width	365 mm

NBS Source UK Search NBS Source... All Sign in

Variant: 1900R.L.L.B - i.Care DOCM L/L Lever Handle with Rimless ...

Height	468 mm WC Pan. 367 mm Cistern.
Uniclass	Pr_40_20_60_02 Accessible WC equipment packages Primary
CAWS	N13/12 Unisex accessible WC equipment packages (Document M) N13/311 Unisex accessible WC equipment packages (Document M)

Specification data - Accessible WC equipment packages

Standards	To BS EN 997, Class 2.
Type approval certificate	Water Regulations Approval Scheme (WRAS)-approved.
Form	Complete accessible WC Doc M package and fittings.
Arrangement	Back-to-wall pack.
Material and colour	-
WC pans	Ceramic, white.

Welcome to NBS Source, the new home of the NBS National BIM Library! Got it

Appendix C

NBS Spec (EXAMPLE ONLY)

1609

Callidus Transport & Engineering Ltd

Ingfield Manor School

Ingfield Manor

Water Neutrality Facilities

04-09-2024

School replacement WCs (EXAMPLE SPEC - NOT FOR USE)

Contents

N13 Sanitary appliances and fittings.....1

N13
Sanitary appliances and fittings

Products

300 WC pans Type A

1. Pan
    1.1. Manufacturer: Armitage Shanks
        1.1.1. Contact details
            1.1.1.1. Address: Armitage
            Old Road
            Rugeley
            Staffordshire
            WS15 4BT
            1.1.1.2. Telephone: +44 (0)870 122 8822
            1.1.1.3. Web: www.idealspec.co.uk
            1.1.1.4. Email: info@thebluebook.co.uk
        1.1.2. Product reference: Contour 21 Splash Schools 305mm Back-to-Wall Toilet
    1.2. Standard: To BS EN 997.
    1.3. Form: Back-to-wall, dual flush.
    1.4. Connecting dimensions: To BS EN 33.
    1.5. Pan height: 305 mm.
    1.6. Materials
        1.6.1. Body: Vitreous china.
        1.6.2. Finish and colour: White.
    1.7. Water supply, outlet and seat holes
        1.7.1. Outlet: Horizontal back outlet.
    1.8. Seat:

335 Wall-hung washbasins Type B

1. Manufacturer: Armitage Shanks
    1.1. Contact details
        1.1.1. Address: Armitage
        Old Road
        Rugeley
        Staffordshire
        WS15 4BT
        1.1.2. Telephone: +44 (0)870 122 8822
        1.1.3. Web: www.idealspec.co.uk
        1.1.4. Email: info@thebluebook.co.uk
    1.2. Product reference: Contour 21 Splash 50cm Schools Basin
2. Form: Wall-hung wash basin.
3. Materials
    3.1. Body: Vitreous china.
    3.2. Finish and colour: White.
4. Size: 500 x 400 mm.
5. Water supply, overflow and waste holes

5.1. Water supply: Single tap hole, centred.

5.2. Overflow: Rear overflow hole.

Execution

610 Installation generally

1. Standards: In accordance with BS 6465-1, -2 and -3.
2. Assembly and fixing: Surfaces designed to falls to drain as intended.
3. Fasteners: Non-ferrous or stainless steel.
4. Fixing: Fix appliances securely to structure. Do not support on pipework.
5. Jointing and bedding compounds: Recommended by manufacturers of appliances, accessories and pipes being jointed or bedded.
6. Appliances: Do not use. Do not stand on appliances.
7. Supply and discharge pipework: Fix before appliances.
8. On completion: Components and accessories working correctly with no leaks.
9. Labels and stickers: Remove.

Ω End of Section



Specification created using NBS Chorus

Appendix D

Example Manufacturer

Ideal Standard

Armitage Shanks

New Regulations for Specifying School Washrooms.

Will you pass the test?







Ideal Standard

PART OF THE IDEAL STANDARD GROUP

With Armitage Shanks, you can get full marks.

Over the last few years, the regulations governing the provision of school washrooms have become complex and confusing. So in 2017, the government undertook a full review of the Facilities Output Specification (FOS) documents, with the aim of making them clearer and easier to use, suitable for refurbs as well as new build and support a more consistent quality standard.

As a result, in November 2017 the regulations were restructured into three sections:

- **Generic Design Brief** – containing overarching design standards
- **Technical Annexes** – containing detailed performance specifications
- **School Specific Documents** – school specific brief, area data sheets, schedule of accommodation, refurbishment scope of works tool

Are your schools washrooms compliant?

For sanitaryware, the key document is Technical Annex 2A. This has been revised to now include primary schools and early years and to define the quality of integrated plumbing systems (IPS), after the review found inconsistent quality and specific gaps across projects together with a lack of clarity.

This booklet will give you a basic outline of Annex 2A, together with the Armitage Shanks range of fully-compliant sanitaryware. Essential reading for any project funded by the Education and Skills funding agency (ESFA).

Education & Skills Funding Agency



How our class-leading support can help.

Armitage Shanks has been a key supplier to schools since 1910, and our experience in the education sector is second to none. So there's no-one better than our experts to help guide you through the new regulations in detail.

We offer a range of services to specifiers, including:

- Advice on specifications and products
- Queries
- Specification writing
- CAD and BIM Drawings
- Product specifications
- Room layouts
- Specification tool



Technical Annex 2A

And how it affects you

Technical Annex 2A sets out new performance criteria for school sanitaryware. But in *terms* of general requirements, Annex 2A uses Building Bulletin 103: Area Guidelines for Mainstream Schools' and for Special Schools, Building Bulletin 104: 'Area Guidelines for SEND and Alternative Provision'. These set out the number of toilets required as:

BB103 – Mainstream Schools







For pupils

Approximately one for every 20 pupils in total, or one for every ten full-time equivalent pupils aged two to four, including reception and nursery places.

For staff

Separate toilets for staff: at least one toilet with wash hand basin plus one for every 25 full-time equivalent members of staff (not including catering staff).

Accessible toilets

For disabled pupils, staff or visitors (may count towards staff toilets), a specialist hygiene room with fixed or mobile hoist and space for assistants to change a pupil. In a primary school this should contain a changing bed and accessible WC unless this is included in an adjacent accessible toilet (9m2). In a secondary school this should contain an accessible shower, sluice toilet and a changing trolley (12m^2).

The key components of a school washroom

All pupil toilets must include the items shown

- Toilet pan
- Soap dispenser
- Toilet paper dispenser
- Wash hand basin or trough
- Hand drier (or fix only)
- Sanitary towel dispenser (females aged over 8) (or fix only)
- Sanitary towel bin
- Mirror (above basin)

BB104 – Special Schools

For special schools, Special Resource Provision (SRP) and units where pupils are less independent, and for pupils aged two to four in any setting.

One fitting for every 10 (full-time equivalent) pupil places in total (where hygiene rooms are provided all but one of these can be counted towards this number).

For any setting where pupils are independent and aged five years and above. One fitting for every 20 pupils in total.

For all settings, at least one accessible toilet for disabled pupils per floor.

The key components of an accessible washroom.

All accessible toilets must include the key components of a school washroom already shown plus the following:

- Accessible WC instead of toilet pan
  (480mm raised height, 750mm projection)
- WC horizontal grab rail
- WC vertical grab rail
- Alarm pull cord
- Alarm reset button
- Mirror (full height)



Back to Wall DOC M Pack with charcoal rails and toilet seat

Durability

Following the requirements set out in the Generic Design Brief, sanitaryware needs to have a minimum life expectancy of 20 years.

Refurbishments

Where sanitaryware is being renewed or replaced, it must comply with Annex 2a; if being repaired, it should comply with the project-specific specification or SSB drawing; if being retained, it is to be left as existing with minimal work.

The new performance criteria of Technical Annex 2A.

Toilet pans and cisterns (4.2)

Toilet pans and cisterns must be manufactured out of vitreous china as in BS 3402 or "in a material which can be demonstrated to work equally as well."

- All parts must be sourced from a single manufacturer (4.2.1.2). Cistern and pipe work must be easily accessible and tamper proof
- Avoid dirt and germ build up
- Dual flush mechanism
- 6/4 litre
- 4.5/3 litre
- 4/2.6 litre
- Dual flush plate
- Flush must comply with water regulations



Splash 355mm Wall Hung WC

Wash troughs (4.3)

- Meets the requirements of Annex 2A
- Supplied with integral upstand and therefore more hygienic and easier to clean seam welded joints in metal troughs are acceptable if smooth finish
- Constructed from solid surface, recycled plastic, vitreous china or a material that can be demonstrated to perform equally well
- Tamper proof lower removeable panel for ease of access and maintenance watertight inconspicuous fixings
- Minimise dirt and germ build up
- Integral splash back designed to avoid dirt and germ build up
- Wall hung with no legs or other connections to the floor for ease of cleaning
- Accessible downstand/panel to conceal services while permitting easy access
- Removable with tamper-proof fixings
- No plugs



Contour 21 150cm 3 person schools wash trough with upstand

Wash hand basins (4.4) & taps (4.10)

Wash basins

- Need to meet requirements of BS EN 14688:2915: sanitary appliances. Wash basins. Functional requirements and test methods
- Made from vitreous china or a material that can be demonstrated to perform equally well
- No plugs
- Minimum of 200mm tiling or similar washable surface on the wall above the basin
- Surface must be fully sealed along the length of the basin
- With basin runs services, such as traps and wastes should be concealed e.g. through vanity units
- Accessible via tamper proof access panel

Taps

- Non-concussive press taps or sensor taps
- Sensor taps must turn off automatically with only one litre of use
- Exception in Special Schools and non-ambulant areas where sensor only taps should be used
- Must comply with flow performance of DEFRA Water Technoclogy List (WTL) Scheme (4lpm)
- Water Regulations Advisory Scheme (WRAS) approved
- Deck mounted taps must be easy to clean around
- Wall mounted taps acceptable with robust wall panelling solution



Splash 40cm semi-countertop basins

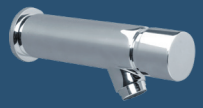
Avon Taps



Avon self closing mixer



Avon self closing pillar taps



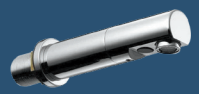
Avon wall mounted tap

Contour 21 Taps



Contour 21 basin pillar tap

Sensorflow Taps



Sensorflow21 230mm tubular spout



Sensorflow 21 compact deck mixer

Soap Dispensers



Deck mounted soap dispenser



Angle deck mounted soap dispenser



Panel mounted soap dispenser

Accessible toilet sanitaryware

- Visual contrast between sanitaryware, grab rails, alarm cord and wall finish
- Toilet seat contrasting colour
- Extended lever single mixer taps with spray outlet
- Accessible cistern via tamper proof access plate. Avoid dirt and germ build up and potential for vandalism
- Fittings should adopt guidance in BS 8300-2:2018+A1:2010

Close Coupled DOC M Pack with Red Rails and toilet seat







For full details of our Education range see our School Washroom brochure.

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