



# Design Guide Note

## DGN005 - Furniture, Fixtures and Equipment (Joinery) in Primary School General Learning Spaces

Document version: 1.0

Review and approved by: *Technical Standards Steering Committee on 1 June 2023*

Conditions of approval:

- A twelve-month trial implementation of DGN prior to integrating standard into EFSG.
- Start early consultation with school principal and teachers to customise design to facilitate teaching.

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## Design Guide Note - Proposed Change

### Intent and Outcome

The current EFSG references to furniture in primary school learning spaces lack clear design principles for fixed joinery. This DGN establishes a set of design principles or criteria for Fixed Furniture and Equipment (FFE), specifically fixed joinery, in Primary School General Learning Spaces (GLSs).

**Table 01: Summary of change proposals**

No.	EFSG Reference	Current Standard	Proposed Change to Standard	Benefits and Opportunities created by proposed change
1	PS401.1	Home Base storeroom	Remove references to Home Base storeroom.	It will allow designers to specify consistent joinery to improve the functionality of the GLS space and reduce clutter.
2	PS401.41 PS430.41 SSP440.41	Personal Effects Storage (PES)	Remove references to PES.	
3	SG551 Drawing	PS401-41 Joinery – 4.14 Bag racks	Remove references to bag racks with bag hooks.	Bag racks / hooks are not considered a viable bag storage solution as it is more spatially demanding than cubby holes.
4	EFSG Design Components	EFSG standardised hub layout for PS GLS	Include design principles and example diagrams	Facilitates the delivery of MMC spaces through KoP.
5	EFSG Technical Standards	Kit of Parts	Include design principles and example diagrams in digital models	

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## Change proposal: GLS Joinery Design Principles

The main aim of the fixed joinery design principles for Primary School GLS is to:

1. Provide secure, lockable cupboards with drawers:
  - The goal is to replace the EFSG storeroom allowance with cabinetry, or the teaching wall, to align with standardisation and MMC requirements. This will improve GLS functionality and reduce clutter.
  - A minimum of 20 linear metres of shelving (as per the EFSG) is required.
  - The cupboards should be lockable for security purposes.
  - Drawers should be included below 1000mm above the Finished Floor Level (FFL) for easy accessibility, as opposed to open shelves (as recommended by the SLEC team).
  - The maximum shelf height should be 1800mm above the FFL for WHS considerations, eliminating the need for staff or students to use a ladder or climb on a chair.
2. Incorporate bag storage cubby holes:
  - This promotes the mobility of furniture. Keeping bags off the floor is crucial for furniture reconfiguration and encourages active pedagogy.
  - At least 30 low-height cubby holes for bag storage are required to ensure easy access for smaller students.
  - To avoid overcrowding, it's recommended to distribute bag storage evenly on each side of the joinery wall.
  - Bag hooks are not seen as a viable internal bag storage solution due to their spatial demands compared to cubby holes.
3. Include whiteboard/writable surfaces adjacent to the Main Learning Display (MLD):
  - These surfaces should be located on each side of the display screen to ensure good sightlines and visibility from the students' desks, thereby meeting pedagogical requirements.
4. Make allowances for service/structure zones:
  - Consider hiding services within the 300mm allowance on each side of the joinery.
5. Ensure offsite fabrication and easy onsite assembly/disassembly/replacement:
  - Use standard industry sizes (e.g., 600mm / 1200mm wide modules).
6. Consider installing bulkheads above the joinery unit to reduce maintenance issues.

7. Incorporate the Main Learning Display (MLD) in the centre of the GLS:

- Both mobile and fixed options should be provided, with the fixed option preferred due to its minimal impact on the usable footprint area (UFA) and its ability to mitigate WHS concerns like loose cabling or trip hazards.
- The display panel should be centrally located along the 9m grid. Off-centre solutions will not be supported by MMC/DaIS/SLEC teams due to educational implications.
- AV mounting should allow for reasonable screen height adjustment.
- A minimum 75" AV panel is required according to ICT, though an 86" AV panel is preferred for new/future projects. Please refer to Figure 01 for the recommended viewing angle.
- Refer to the 'Multimedia Solutions' mandated contract for details on the suppliers and products

Distance to furthest viewer	Size of display (In diagonal inches)
3-4 Meters	55"
4-5 Meters	65"
5-6 Meters	75"
6-7 Meters	80"
> 7 Meters	> 84"

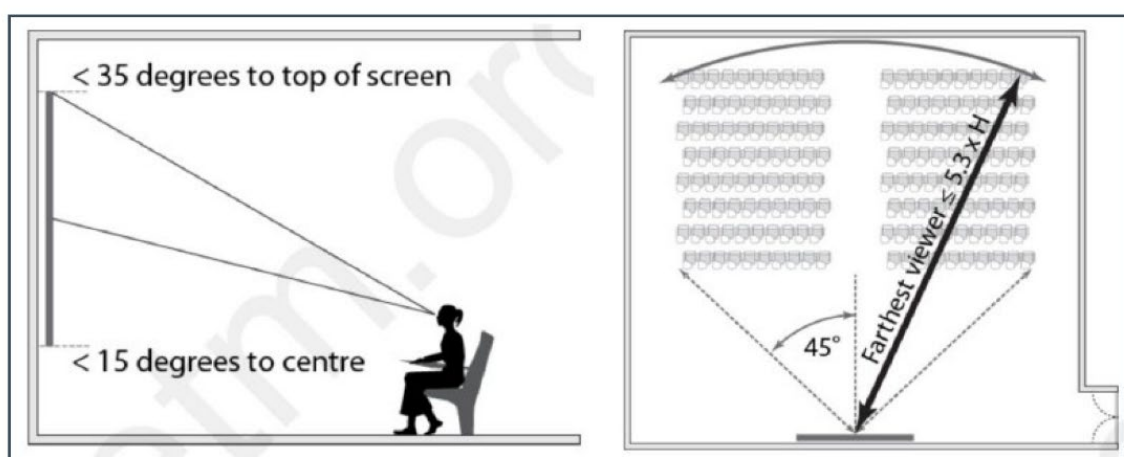
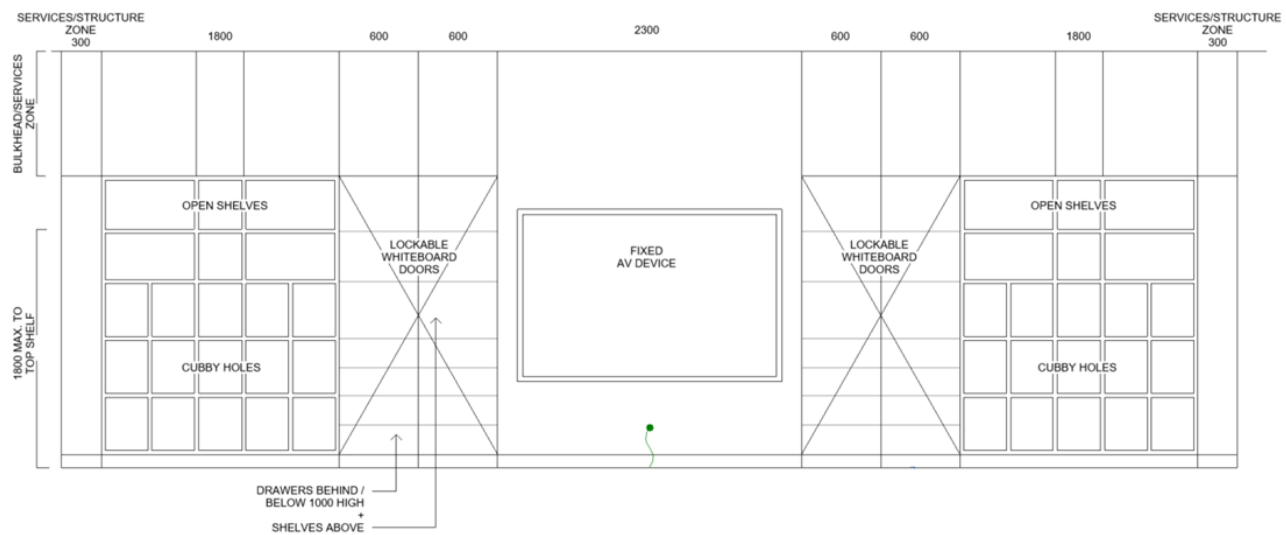


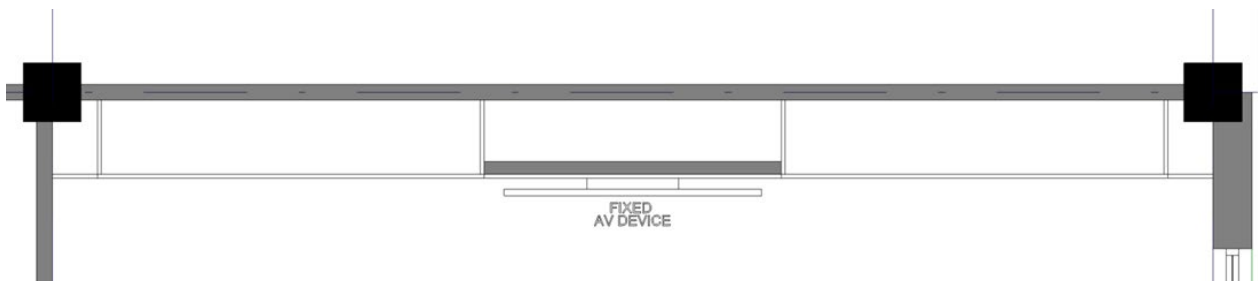
Figure 01: Screen viewing angle recommendation

## Considerations for Fixed Main Learning Display (MLD) Option:

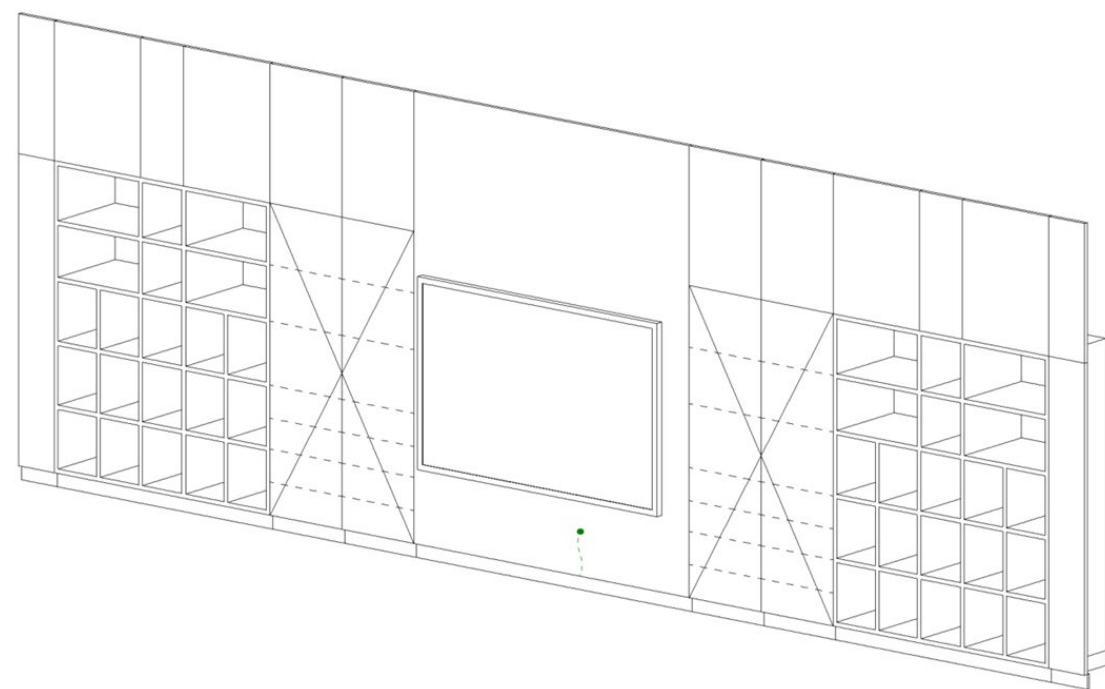
- A mandatory 500mm clearance is required on either side of the panel to allow for servicing.
- The panel should protrude from adjacent surfaces to facilitate access during servicing.
- The central MLD zone, nominally sized at 2.3m wide, may be designed as a false wall instead of joinery, for instance, a stud wall with a pinboard on plywood backing.
- Fixed MLD within GLSs could potentially limit teaching capabilities within Learning Commons (LC). An alternative option is to consider the inclusion of a ceiling-mounted AV device with casting ability within the LC, acknowledging this would incur additional cost.
- ICT requirements include that the full wall must be unobstructed, meaning there should be no additional joinery installed either above or below the AV device.



**Figure 02: Elevation - joinery with fixed MLD**



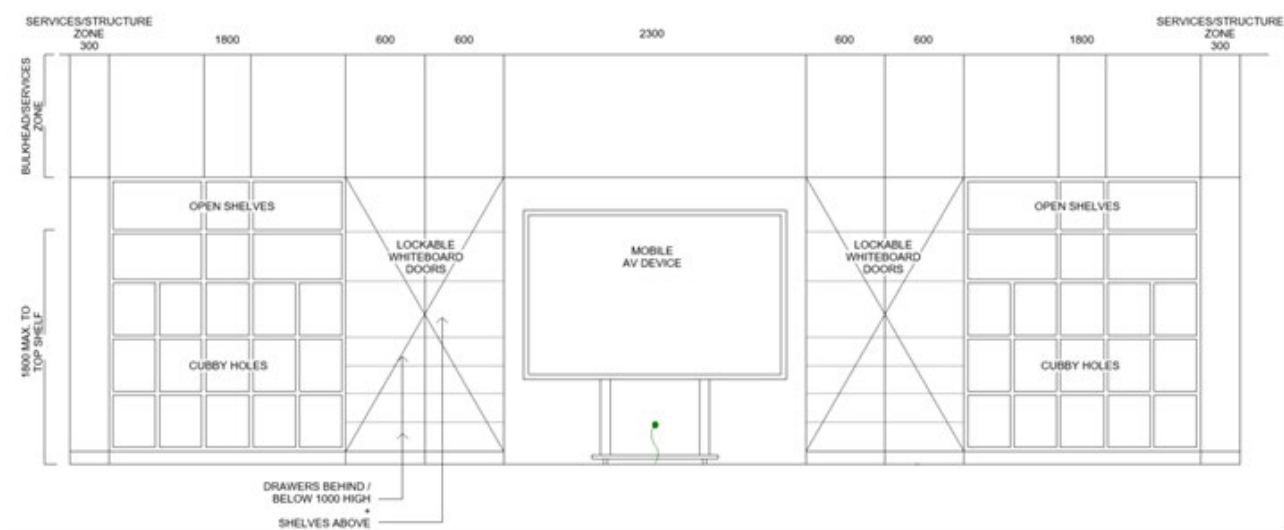
**Figure 03: Plan - joinery with fixed MLD**



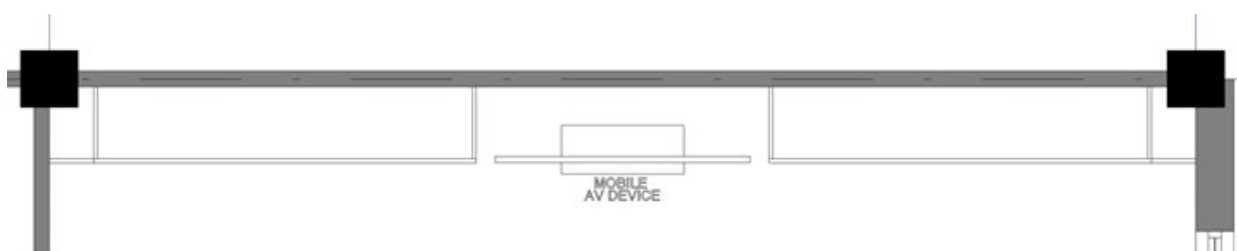
**Figure 04: 3D view - joinery with fixed MLD**

## Considerations for Mobile Main Learning Display (MLD) Option:

- The mobile unit should be placed centrally within the joinery nook, with all cables neatly arranged behind the unit.
- Careful attention should be given to Work Health and Safety (WHS) concerns such as loose cables and potential trip hazards when the unit is relocated within the room or to other rooms.
- Thoughtful planning is required to designate suitable power and AV points, as well as a safe parking location for the mobile unit within the Learning Commons (LC). This is to ensure it does not pose a hazard as students move around the room.

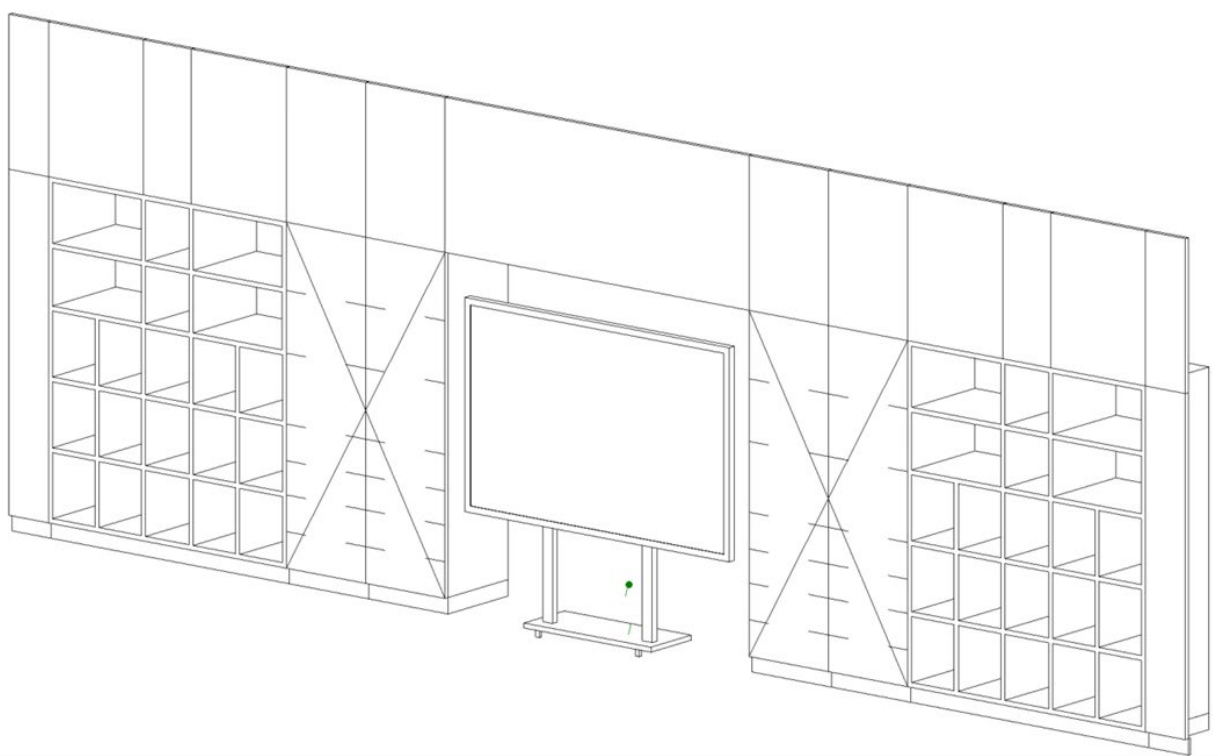


**Figure 05: Elevation - joinery with mobile MLD**



**Figure 06: Plan – joinery with mobile MLD**





**Figure 07: 3D view – joinery with mobile MLD**

*The Design Guide Note provides the details of the proposed changes to Education Facilities Standards and Guidelines (EFSG) and/or design guidance for technical and project teams. If your projects are unable to meet these parameters, then please reach out to the Design and Infrastructure Standards (DaIS) team to assist. The DaIS team can help navigate achievable outcomes whilst informing ongoing development of SINSW projects.*