

This supplementary document is to be read in conjunction with agencies' joint circular "Harmonisation of Floor Area Definitions by URA, SLA, BCA AND SCDF" dated 1 Sep 2022 (see circular [here](#)).

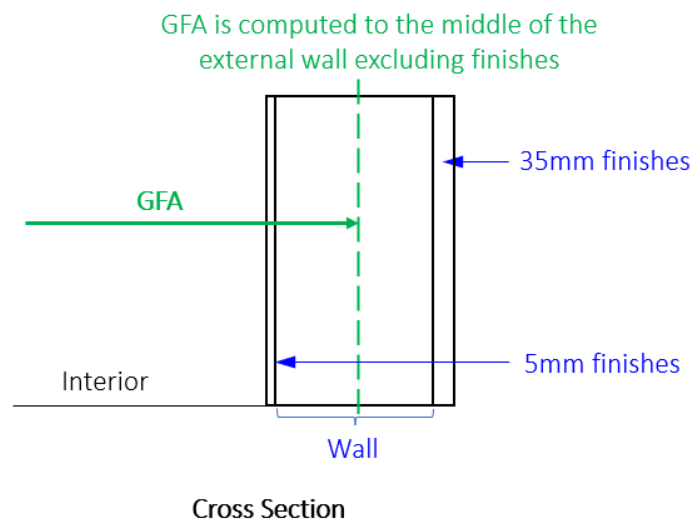
## **CLARIFICATIONS ON URA'S GROSS FLOOR AREA (GFA) DEFINITION**

Following the release of agencies' joint circular on 1 Sep 2022, URA had engaged the industry at various platforms to seek further feedback and provide clarifications on the revised GFA definition. We have collated these clarifications into this supplementary document, to facilitate industry preparations when the new GFA definition takes effect on 1 Jun 2023.

### **Q1. Does GFA computation consider the thickness of wall finishes?**

GFA will be measured up to the middle of the external wall, excluding wall finishes.  
*[Note: Wall finishes, if shown in drawings, are to have their thickness reflected in order to facilitate GFA demarcation]*

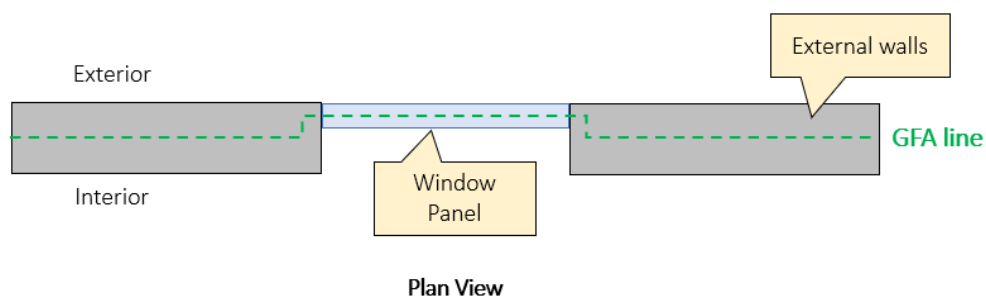
#### **Example of GFA demarcation for an external wall with finishes**



### **Q2. How is GFA measured where there are windows/doors of varying thickness along the external wall?**

GFA will be measured up to the middle of such window and door components.

#### **Example of GFA demarcation for windows along an external wall**



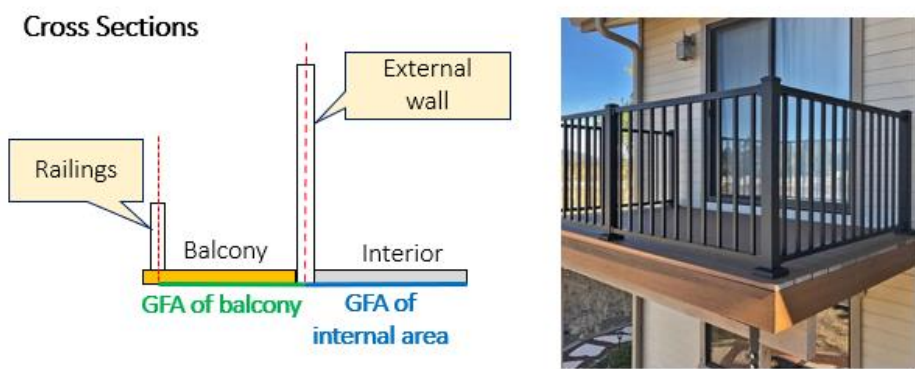
**Q3. How is GFA measured where there are other types of vertical structures at the edge of the floor slab (e.g. railings) in-lieu of external walls?**

GFA will be measured up to the middle of the outermost vertical structures.

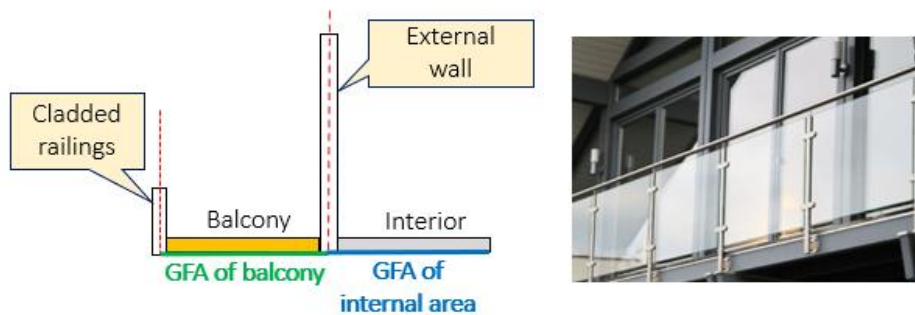
However, if there are spaces beyond the vertical structure that is proposed to be included as strata area, this strata area will also be included as GFA.

**Examples of GFA demarcation for railings**

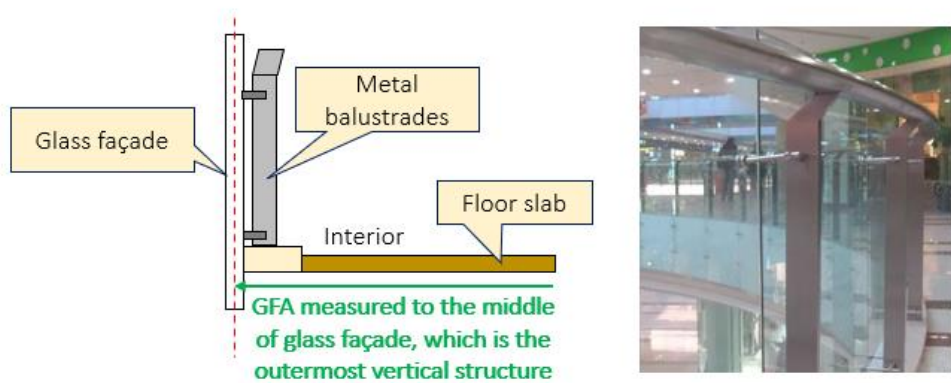
**Scenario 1 – Balcony with railings on slab**



**Scenario 2 – Balcony with railings clad on the side of slab**



**Scenario 3 – Glass façade with metal balustrades at shopping mall**

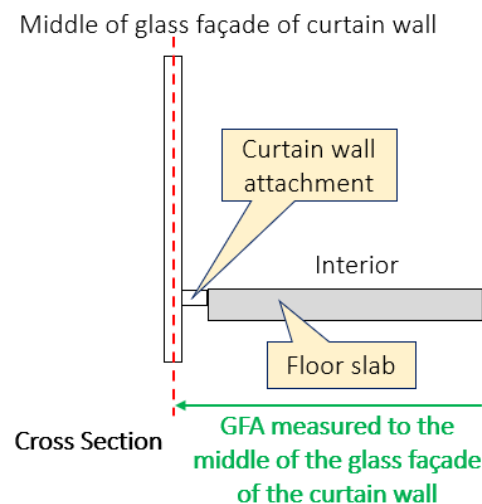


**Q4. GFA will in future be measured to the middle of curtain walls. What are the implications if there are subsequent changes to the curtain wall design?**

Curtain walls will be treated no different from any external walls, with GFA measured up to the middle of the curtain wall. Hence, the developer and project team will need to ensure that any changes to such wall systems will still allow the development to keep within the permissible GFA for the site.

For this reason, we encourage the developer to work closely and involve the relevant parties at the early design stage so as to firm up the curtain wall design to minimise downstream abortive work.

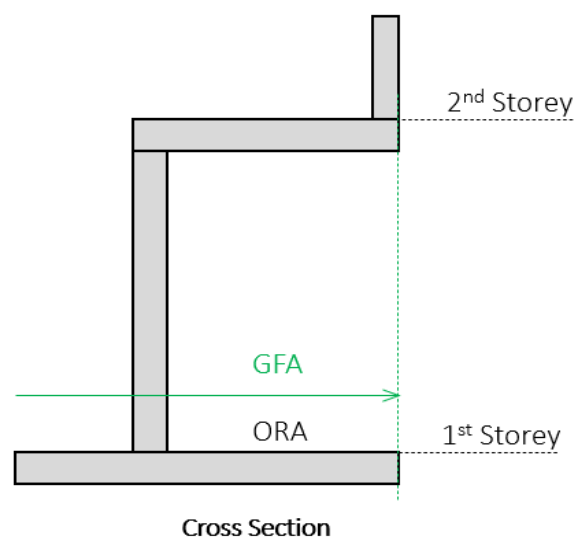
**Example of GFA demarcation in curtain wall**



**Q5. How is GFA measured where there are no external walls or similar vertical structures?**

GFA will be measured to up the edge of the covered area.

**Example of GFA demarcation for ORA**

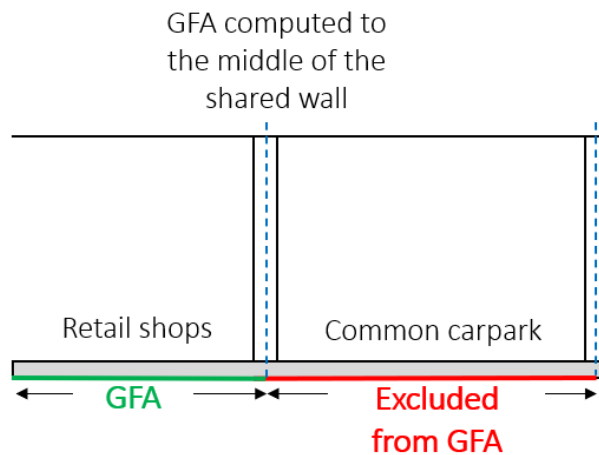


**Q6. What is the GFA treatment for a wall that is next to a space excluded from GFA?**

If the wall is between a GFA and space excluded from GFA computation (e.g. shop space and common carpark), the GFA of the shop space will be measured up to the middle of the wall.

If the wall is between 2 spaces that are excluded from GFA (e.g. common carpark and outdoor open-to-sky area), the wall can be excluded from GFA.

**Example of GFA demarcation for walls next to non-GFA spaces**

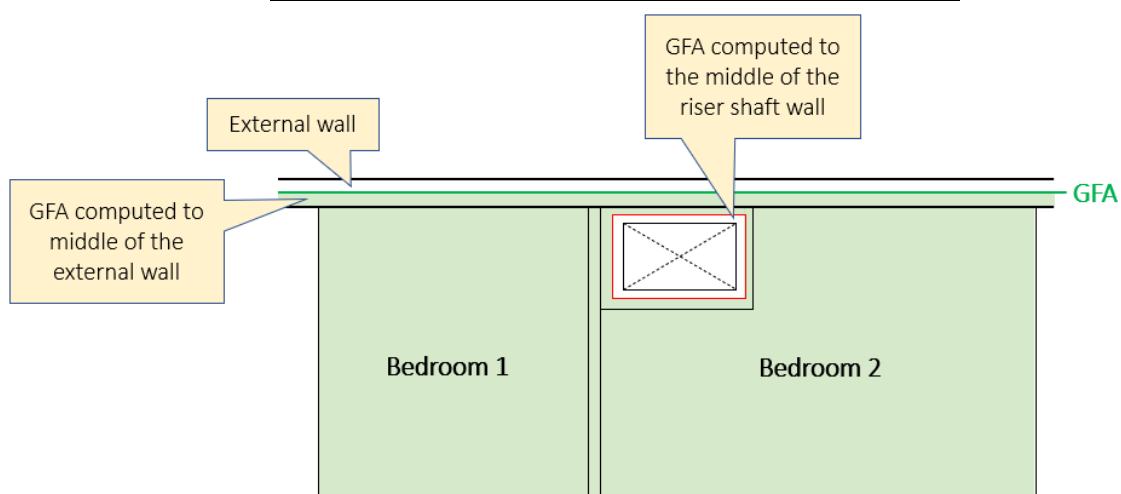


Cross Section

**Q7. I have a riser shaft (void space) built directly next to the external wall. Can the entirety of the 2 walls (shaft wall and external wall) be excluded from GFA?**

In cases where there are 2 walls abutting each other, these will be assessed on the basis of them being distinct walls. In this particular scenario, the inner half of the riser shaft wall can be excluded from GFA. The remaining covered floor areas will need to be computed as GFA.

**Example of GFA demarcation of a unit with void space**

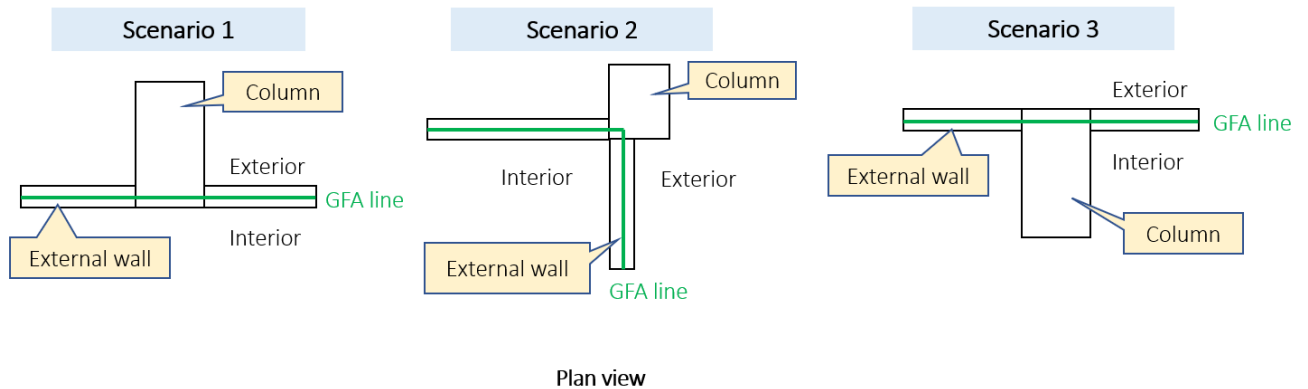


Plan view

**Q8. How is GFA measured where there are columns of varying thickness along the external wall?**

There is no need to account for these columns and GFA will continue to be measured to the middle of the external wall.

***Examples of GFA demarcation for walls with columns***



**Q9. Does the new GFA definition apply to landed and strata landed housing developments?**

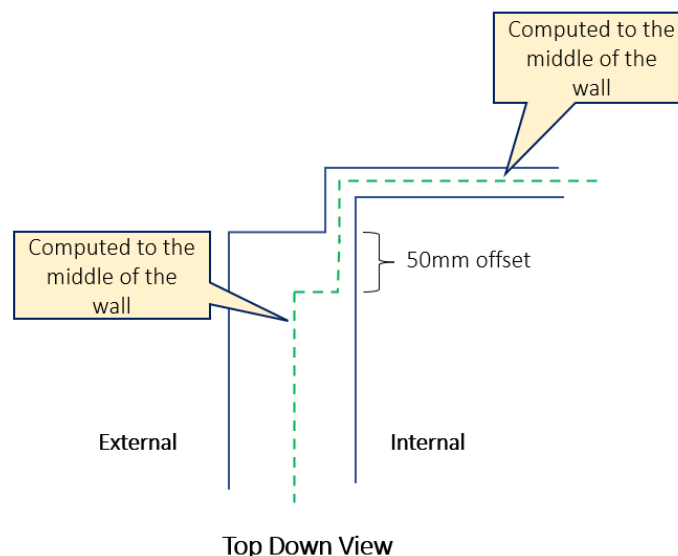
Yes, the revised definitions will also apply to all developments, including landed and strata landed housing.

In the case of strata landed housing, this means that other than covered floor areas, all proposed strata areas (whether covered or otherwise) will be computed as GFA. Examples include private enclosed spaces (PES), private roof terraces (PRT) or private carpark lots. This is consistent with the approach for non-landed strata developments (flats/condominiums).

**Q10. Why is the 50mm offset required when demarcating GFA for connecting walls with varying thickness?**

This is to align with how the industry currently delineates strata area along external walls.

***Example of 50mm offset for walls of different thicknesses***



**Q11. There are certain spaces within mixed-use developments that are included as strata area purely for the purpose of demarcating ownership / maintenance responsibilities between the different building users.**

**However, these spaces are meant to serve a communal function (e.g. public carpark lots, communal roof gardens & sky terraces, public walkways & linkages). Will including these spaces as strata area result in them being counted as GFA under the revised definition?**

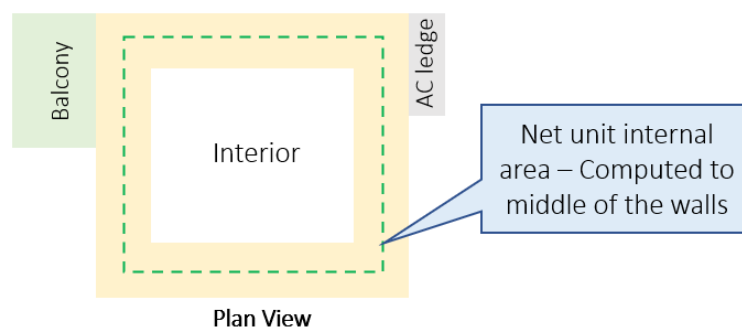
There are currently various communal spaces that can qualify for GFA exemption, subject to compliance with URA's detailed guidelines (e.g. sky terraces, privately-owned public spaces (POPS), covered walkways, common carpark lots). These communal spaces will continue to be considered for GFA exemption under the revised definition, even if they are owned en-bloc and form part of a larger strata lot for the purpose of demarcating ownership in mixed-use developments.

For example, in a hotel / office mixed-use development, the proposed communal sky terrace within the hotel (and is within the hotel strata lot owned be-bloc) can continue to be considered for GFA exemption, if it complies with URA's GFA exemption guidelines.

**Q12. URA has guidelines limiting the size of certain spaces in residential developments (e.g. size of balcony capped at 15% of the unit's internal area, minimum 35sqm nett unit internal). Will this change with the revised GFA definition?**

These requirements remain to ensure the spatial quality of such spaces. However, we will harmonise the measurements with the way GFA is computed, allowing the area of these various spaces to be determined by measuring to the middle of the walls or other similar external building features such as railings.

**Example of net unit internal area computation – Computed to the middle of the unit's walls but continue to exclude AC ledges, voids and semi-outdoor spaces (e.g. balconies)**

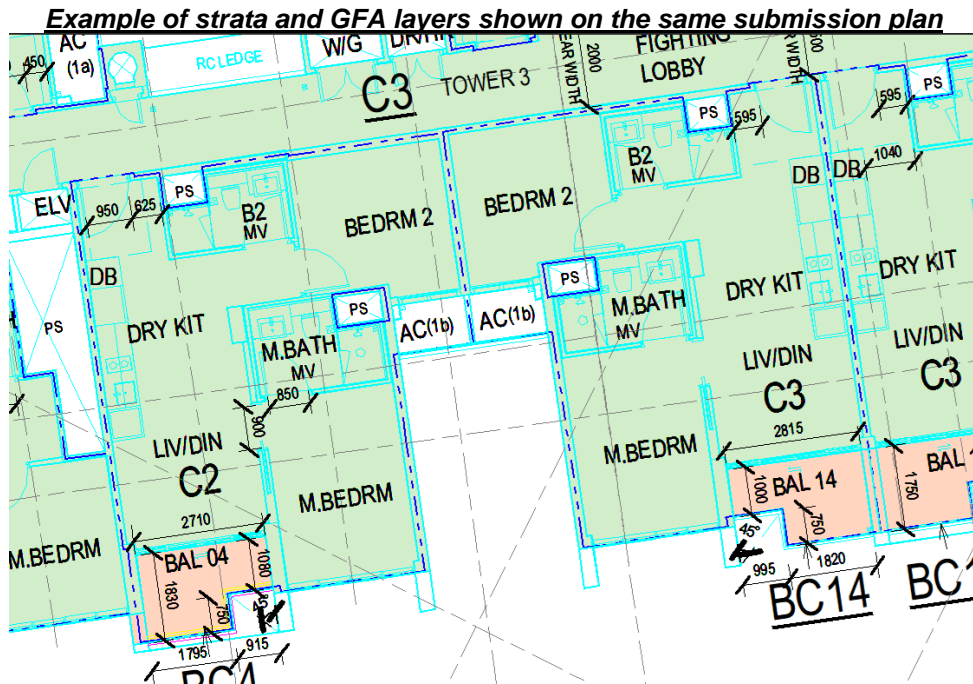


**Q13. Does this mean that QPs now have to reflect the strata area demarcation in their submission plans for proposed strata-titled developments? What happens if there are proposed changes in the strata boundaries after the development has obtain planning permission?**

Today, URA already requires QPs to reflect the proposed strata boundaries on the submission plans when assessing proposed strata-titled developments prior to grant of Written Permission. To facilitate URA's assessment for grant of Written Permission, QPs should clearly reflect both the GFA and strata boundaries on the same submission plan (see example below) and ensure all proposed strata areas have been duly computed as GFA.

Downstream changes to strata boundaries may affect the resultant GFA of the development. Applicants need to ensure that any increase in GFA for the development will still need to be regularised in accordance with the Master Plan permissible parameters, before strata subdivision approval can be granted.

Thus, we highly encourage developers and architects to involve surveyors upstream in the development process to firm up the strata boundaries, and avoid potential abortive work downstream.



**Q14. How will the revised GFA definition apply to existing developments carrying out A&A works?**

As a general principle, the new GFA definitions will only apply to the areas affected by the A&A works and there is no need to recompute the GFA of the existing development (i.e. existing untouched areas can still retain the old GFA definition).

Given that the nature and scope of A&A works will vary across developments, applicants may wish to pre-consult URA prior to making a submission.

**Q15. Will the changes affect the approved GFA for existing developments?**

For existing developments approved before 1 Sep 1989, these were approved based on either the density or net floor area (NFA) methods. Owners of such developments who wish to determine their approved GFA are currently required to update the development's GFA to the prevailing GFA definition. The updated GFA will then form the approved GFA for the development.

For existing developments approved after 1 Sep 1989, these were already approved based on the GFA. Owners can continue to take reference from the last approved GFA for these developments when planning for any A&A works. There is no need to further "update" the GFA for such post-1989 developments.

There is no change to the above current practices.

**Q16. As (strata) AC ledges will in future be computed as GFA, it is likely that such spaces in new developments will be right-sized. Will this compromise maintainability of AC equipment downstream?**

All AC ledges should continue to comply with BCA's design for maintainability guidelines to ensure that they are adequately sized for ease of downstream maintenance. QPs and building owners can refer to Clauses 3.1.2 (a) and 3.1.2 (b) under the Maintainability Section for Residential Building [here](#).

**Q17. AC ledges may have railings or screens installed along the edges. Will there be a difference in GFA computation if these AC ledges are retained as common property or included as strata area?**

AC ledges, if proposed as common property, will be excluded from GFA up to a depth of 2m. However, if these AC ledges are included as strata area for a particular unit, the extent of GFA demarcation for the AC ledge will align with the proposed strata area boundary, regardless of the position of the vertical railings or screens.