

Checklist for Curtain Wall Details Submissions

(This checklist is **not** required to be submitted to the BD.)

Part A–Administration

Typical Items		Requirements	Reference
1.	Statutory Forms	<input type="radio"/> Form BA 4 (for appointment of AP/RSE/RGE)	ADM-8 APP-37 B(A)R 18A and 29(1)
		<input type="radio"/> Form BA 5 (for application for approval)	
		<input type="radio"/> Form BA6 (Stability Certificate as necessary)	
		<input type="radio"/> Form BA16 (Application for exemption/ modification as necessary)	
		<input type="radio"/> Separate RSE appointed (Scope of works responsible and assessment report if necessary)	
2.	Fee for plan processing	<input type="radio"/> Payment required when fees are charged according to total number of plans submitted	APP-55
3.	Plans and Documents	<input type="radio"/> 2 signed sets of plans and 1 signed set of all documents	ADM-8 APP-141

Part B - Documents

Typical Items		Requirements	Reference
1.	Design Document : Part I – Synopsis and Essential Information	<p>A description of the curtain wall system includes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Description of the curtain wall system <ul style="list-style-type: none"> • e.g. load path and load transfer <input type="checkbox"/> Updated design codes and standards adopted <input type="checkbox"/> Design approach <ul style="list-style-type: none"> • e.g. limit state or permissible stress <input type="checkbox"/> Updated material and workmanship specifications <input type="checkbox"/> Building materials and components <ul style="list-style-type: none"> • e.g. fire stop materials, fire resisting glazing, structural fixings, structural sealants, etc. with BD CDB ref. no., if applicable <input type="checkbox"/> Allowable load capacities of structural fixings <ul style="list-style-type: none"> • e.g. embeds and anchors, etc. <input type="checkbox"/> Allowable limits of deflection for all mullions, glass panel, etc. <input type="checkbox"/> Summary of reaction forces of cast-in anchorages for checking against superstructure plans 	ADM-8 ADM-20

Typical Items		Requirements	Reference
		<p>Specifications on design loads:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wind loads <ul style="list-style-type: none"> • comply with HK Wind Code • in accordance with Wind Tunnel Test <input type="checkbox"/> Wind channel down effect for external building elements <ul style="list-style-type: none"> • like canopy, etc. <input type="checkbox"/> Horizontal imposed loads <ul style="list-style-type: none"> • protective barrier loads adopted in accordance with Table 3 of B(C)R 17(3) <input type="checkbox"/> Effect of temperature and atmospheric pressure changes for IGU glass <ul style="list-style-type: none"> • e.g. allowing an additional wind load or other approach 	ADM-19 APP-37 APP-139
		<input type="checkbox"/> Pre-accepted structural computer program: <ul style="list-style-type: none"> • Statement endorsed by RSE 	ADM-6
		<input type="checkbox"/> Information on the computerized calculations: <ul style="list-style-type: none"> • Assumptions made and justifications on parameters used e.g. material properties, boundary conditions, etc. • Input data with computer-generated graphics or hand sketch showing the framing & layout of the system, nodes & elements, joint fixity, etc. 	ADM-8
2.	Design Document: Part II - Detailed analysis and design	<input type="checkbox"/> Detailed analysis and design: <ul style="list-style-type: none"> • Design check on anchor fixing of the parent supporting structure • Analysis on the structural adequacy and stability of the proposed curtain wall system • Primary and secondary element design for mullions, aluminium alloy, fixing components and glazing • Deflection check on major load carrying members 	APP-37

PART C – Plans

Typical Items		Requirements	Reference
1.	Plans properly indexed and space reserved at the lower right corner for official stamps of approval	<ul style="list-style-type: none"> <input type="checkbox"/> Plans to be properly indexed and each drawing to bear a title and number <input type="checkbox"/> Vertical space (90mm wide x 200 mm high) or horizontal space (245mm wide x 80mm high) for accommodating official stamps of approval, curtailed check and true copy certification by the BA on every plan at the lower right corner 	ADM-8 ADM-10

Typical Items		Requirements	Reference
2.	A block plan showing the location of the site and relevant details	<input type="checkbox"/> Location of the site together with adjoining buildings, structures, lands, streets, access road over which right of way, if any, granted, etc. to be shown.	APP-18
3.	Plans and sections in appropriate scales for readability	<input type="checkbox"/> Scale to follow B(A)R 13: <ul style="list-style-type: none"> • Avoid excessive large scale shop drawing details • Plans and sections/elevation to be in a scale not less than 1:100; except that a scale of not less than 1:200 may be accepted for cases of very extensive works 	B(A)R 13
4.	General Notes on Design Codes and Standards	<input type="checkbox"/> Design Codes and Standards: <ul style="list-style-type: none"> • Design code of practice • Construction standards • Design loading • FRR 	APP-37 Appendix A
5.	General Notes on Material Specifications with limiting stresses	<input type="checkbox"/> Material specifications: <ul style="list-style-type: none"> • Structural steel, aluminium alloy, cast-in anchors, fixing screws, structural sealant, glazing, fire stop, 	APP-37 Appendix A
6.	General Notes on quality control standards and testing on workmanship	<input type="checkbox"/> Workmanship specifications: <ul style="list-style-type: none"> • Welding, galvanization, measures to overcome bi-metallic effects and corrosion prevention <input type="checkbox"/> Specifications on allowable tolerance of the positioning of curtain wall supports: <ul style="list-style-type: none"> • Remedial arrangements in cases where such tolerance is exceeded <input type="checkbox"/> Safety test: <ul style="list-style-type: none"> • Location of safety test on a representative portion 	APP-37 Appendix B
7.	Plans showing the layout arrangement of the structural system	<input type="checkbox"/> Structural framing: <ul style="list-style-type: none"> • Elevations including pane arrangements • Type and thickness of glass • Members schedule and sectional properties of aluminium sections • The location of different types of cast-in anchorages demarcated on plans <input type="checkbox"/> Protection of openings: <ul style="list-style-type: none"> • Protective barriers at openings <input type="checkbox"/> Allowable load capacities of structural fixings: <ul style="list-style-type: none"> • Embeds and drill in anchor 	APP-37

Typical Items		Requirements	Reference
8.	Structural details of curtain wall	<input type="checkbox"/> Key structural details: <ul style="list-style-type: none"> • Main and secondary elements • Installation procedures if applicable excluding any unnecessary shop fabrication details • Typical and non-typical sections showing structural members and supports • Typical and non-typical connections details for different steel sections • Mode of support form and connection to the load-bearing structure of the building • Anchorages in structural concrete members or welded connections to structural steel members • Bite width of structural sealant to comply with relevant standard <input type="checkbox"/> Projection of the curtain wall system from the outer face of the structural elements <ul style="list-style-type: none"> • e.g. from beams, columns and floor slabs to comply with relevant Regulations <input type="checkbox"/> Sections showing compliance with Regulation 90 of the B(C)R and the Code of Practice for Fire Safety in Buildings 2011, such as:- <ul style="list-style-type: none"> • 300mm solid upstand in accordance with APP-2 • Fire-rated spandrel in accordance with Clause 11.1 of FS Code 2011 • Effective smoke and fire barrier in accordance with Clause 10.2 of FS Code 2011 <input type="checkbox"/> Location of openable window should be shown and marked “for approval in locked position only”	APP-2 APP-37

(2/2016)