

4.2. REQUIRED ACOUSTIC PERFORMANCE

Based on the Sound Exposure Categories (SECs) outlined in Table 4.2 above, the following acoustic performance is required for the building envelope for rooms identified as SEC 1 - 4 in Appendix A.

Table 4.1: Minimum airborne sound attenuation ratings (Rw and Rn, Cn) for habitable rooms

Sound Exposure Category (SEC):	Building element:	Acoustic requirements:
1	External walls	R _a + C _a ≥ 45 for all habitable rooms
	Windows and external glazed doors	Refer to Table 4.2
	Ground Floor	R _a + C _a ≥ 50 for all habitable rooms
	External walls	R _a + C _a ≥ 50 for all habitable rooms
2	Windows and external glass doors	Refer to Table 4.2
	External doors other than external glass doors	R _a ≥ 27 (for all habitable rooms)
	Roof and Ceiling	R _a + C _a ≥ 35 for bedrooms
	Ground Floor	R _a + C _a ≥ 50 for all habitable rooms
3	External walls	R _a + C _a ≥ 50 for all habitable rooms
	Windows and external glass doors	Refer to Table 4.2
	External doors other than external glass doors	R _a ≥ 30 for all habitable rooms
	Roof and Ceiling	R _a + C _a ≥ 40 for bedrooms R _a + C _a ≥ 35 for all other habitable rooms
4	Ground Floor	R _a + C _a ≥ 50 for all habitable rooms
	External walls	R _a + C _a ≥ 50 for all habitable rooms
	Windows and external glass doors	External glass doors not permitted in bedrooms See Table 4.2
	External doors other than external glass doors	R _a ≥ 30 for all habitable rooms
	Roof and Ceiling	R _a + C _a ≥ 45 for bedrooms R _a + C _a ≥ 40 for all other habitable rooms

14 August 2018

City & Brc Pty Ltd

Page 4 of 16

Table 4.3: Additional wall types proposed

Wall system	Construction	Required Performance (Rw+Cn)	Predicted Performance Rn (Cn)	Apartments	Recommendations
9/E	90mm stud framed	50	50 (-11)	G 01	Upgraded to one of the walls
	1 layer 16mm Fyrciek plasterboard to each side			1.0+1.10	exterior use as specified in Table 2 of Specification F5.2 of the NCC for apartments 1.08, 1.09 and 2.08, 2.09.
				2.0+2.02	
				2.05+2.10	
6/F IE	Coltboard vertical cladding on 13mm Rondo turning channels	45	57 (-12)	1.0+1.02	Meets required performance
	82mm stud framed walls			1.05+1.07	
	1 layer 16mm Fyrciek plasterboard to each side			2.0+2.02	
				2.05+2.07	
6/F IE	Coltboard vertical cladding on 13mm Rondo turning channels	50	70 (-10)	4.0+4.04	Meets required performance
	2 rows of 82mm steel stud framed walls			1.0	
	1 layer 16mm Fyrciek plasterboard to each side			2.0	
				3.0+3.05	

Coltboard vertical cladding on 13mm Rondo turning channels
2 rows of 82mm steel stud framed walls
1 layer 16mm Fyrciek plasterboard to both sides of outer studs
10mm plasterboard to inner face

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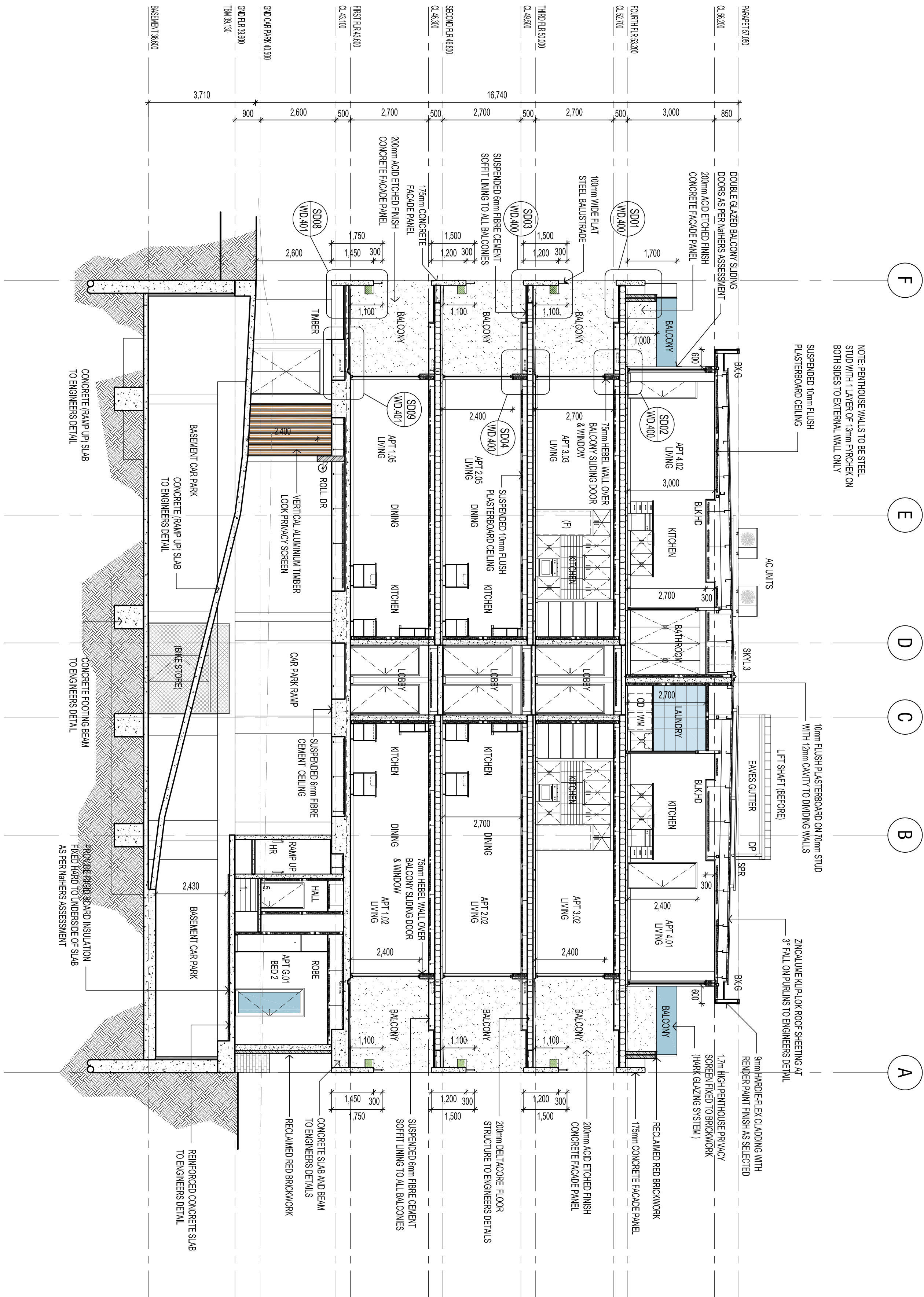
14 August 2018

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Page 6 of 16

FLOOR TO FLOOR SEPARATION NOTE
FLOOR TO FLOOR SEPARATION MUST OCCUR
VIA FIRE RATED FLOOR PENETRATIONS

FLOOR WASTE NOTE
ALL ROOMS WITH A VESSEL REQUIRE A FLOOR WASTE
IF THERE ARE NO BUILT IN OVERFLOW PROVISIONS



NatHers REPORT

REFER TO THE ENGINEERS' NATHERS ASSESSMENT REPORT FOR THE THERMAL INSULATION & GLAZING REQUIREMENTS.

SECTION NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, DOCUMENTATION, SCHEDULES AND SPECIFICATIONS.

ACOUSTIC NOTE

REFER TO THE UPRC ENGINEERS' ACOUSTIC ASSESSMENT REPORT FOR THE REQUIRED NOISE LIMITS.

N/A ADDITION, REFER TO COMUL PLANNING CONDITION 16 FOR GLAZING ACOUSTIC;
- 8mm LAMINATED GLAZING FOR GROUND FLOOR TENANCES
- 8mm LAMINATED GLAZING (10mm GAP) FROM GLAZING FOR BEDROOMS FACING PROSPECT ROAD

ACOUSTIC NOTE

BUILDER TO CHECK AND COVER ALL SITE LEVELS AND SET OUT DIMENSIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION

WRITTEN DIMENSION TO BE GIVEN IN PREFERENCE TO SCALE

GROUND LEVELS AND FINISHED FLOOR LEVELS INDICATED ARE APPROXIMATE ONLY, AND ARE TO BE COVERED ON SITE

REFER TO ENGINEERS' DESIGN, DOCUMENTATION, CALCULATION AND SPECIFICATION FOR STRUCTURAL, ELECTRICAL, HYDRAULIC, CIVIL AND FOOTING DETAILS (IF APPLICABLE)

ROOF CONTRACTOR SHALL PROVIDE ALL NECESSARY FLASHINGS, CHAPING AND OTHER ITEMS REQUIRED TO COMPLY WITH NCC & RELEVANT BUILDING CODES

STAIRS TO BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE TCCAT STAIRWAY DESIGN TO EXISTING LIGHT STAIRS TO WHICH A RAIL FURNISH OR SUITABLE NON-SLIP STAIR

BALUSTRADE TO COMPLY WITH NCC PART 3.3.2 WITH HEIGHT NO LESS THAN 900mm ABOVE STAIR TREAD NOSING AND NO LESS THAN 1050mm ABOVE FINISHED FLOOR OR BALCONY

ALL CEILING LININGS TO BE 10mm UNLESS OTHERWISE NOTED ON DRAWINGS

ALL WALLS REQUIRED TO HAVE SOUND INSULATION MUST CONTINUE TO UNDERSIDE OF WALL OR ROOF ABOVE

ALL APARTMENT ENTRY DOOR ASSEMBLY MUST PROVIDE RW OF NOT LESS THAN 30

CEILING INSULATION
PROVIDE CEILING INSULATION WHERE POSSIBLE BETWEEN SOLE OCCUPANCY UNITS OR SOLE OCCUPANCY UNIT FROM A PUBLIC ROOM, LIFT SHAFT, STAIRWAY, MANUFACTURER'S RECOMMENDATIONS

PROVIDE WATERPROOF SARKING TO UNDERSIDE OF ROOFING

ALL WATERPROOFING TO MEET AREAS BE IN ACCORDANCE WITH AS/NZS 4004

EARLY FIRE HAZARD NOICES OF WALL, FLOOR, CEILING, DRINKING AND FLOOR COVERING DOCUMENTATION TO COMPLY WITH CLAUSE 6.1.10 OF THE NCC

ANY DISCREPANCIES IN DOCUMENTS AND/OR ON SITE TO BE REPORTED TO THE ARCHITECT BEFORE ANY WORKS COMMENCED



CITY OF

PERFONE

FOR CONSTRUCTION

DATE: 18/03/2018	DATE: 18/03/2018
DRAWN: D. PERFONE	CHECKED: D. PERFONE
SCALE: 1:100	PAPER: A1
WD: 304	BY: B

FLOOR TO FLOOR SEPARATION NOTE
FLOOR TO FLOOR SEPARATION MUST OCCUR VIA FIRE RATED FLOOR PENETRATIONS

3

