X10 – Lift Finishes

IRAL-[X10]-0001

Rev	Summary of Changes	Author	Date	Check	Status
F00	Tender Issue	PB	04.12.08	AS	Stage F
F01	010 updated per latest design – as in RED	PB	12.12.08	TM	Stage F
K00	Lighting Specification updated, Glass removed – Issued for Construction	PB	19.01.08	AS	Stage K
K01	010 clauses on entrance architaves, LOP's and LIP's updated.	PB	06.03.09	TM	Stage K
K02	**Revised COP secondary access door to MDF**	**TM**	**08.02.10**	**TM**	**Stage K**

X10 LIFT FINISHES

To be read with A00 Preliminaries/ General Conditions and MEP Engineers specification for lift.

GENERALLY

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010 LIFT: TYPE Schindler 5400 or approved equivalent

General:

- Applicable Reference:	BS EN 81-1 where applicable to MRL, EN 81-70, BS 3800.
- Manufacturer:	Schindler Ltd (UK) or other approved Benwell House,Green Street Sunbury on Thames TW16 6QT Phone: +44 (0) 1932 758 100 Fax: +44 (0) 1932 758 258 Contact: Simon Over [simon.over@gb.schindler.com]
- Product Reference:	Schindler 5400
- Capacity:	10 person 800kg passenger lift.
- Car Size:	1150w x 1650d x 2200h
- Car Entrances:	2 (Rear opening to level 0 only)
- Door Size:	900w x 2000h
- Door Type:	2 Panel Side
- Travel Distance:	12850mm, to be confirmed on site.
- Speed:	1.6 m/s
- Minimum Shaft Size:	1650mm wide x 2200mm deep
- Nominal Shaft Size:	1675mm wide x 2225mm deep (to include tolerances)
- Headroom:	3550mm minimum above top landing, to be confirmed on site.
- Location:	Basement, Lower Ground, Upper Ground, 1st, 2nd and 3rd floors
- Fire/Evac:	No requirements
- Drawing references:	IRAL-1050 GA Sections and Elevations. IRAL-1051-62 Floor by Floor Plans, Sections, Elevations IRAL-2100-03 Internal Car Elevations and Control Panel Set Outs IRAL-2104-05 Architrave set-out elevations IRAL-2110-2119 Details Refer to KSAS(Lift)001 Specification.
- Car bodywork:	Standard arrangement lift car compliant with BS EN 81 requirements.

External Lift Car Finishes:

- Front Wall:	Not exposed to public Steel to lift manufacturer's recommendation.
- Side Walls:	Not exposed to public Steel to lift manufacturer's recommendation.
- Rear Wall:	Not exposed to public Steel to lift manufacturer's recommendation.
- Roof System:	Steel to lift manufacturer's recommendation.

- Underside System: Steel to lift manufacturer's recommendation..

Internal Lift Car Finishes:

-General:	Location:	Refer to IRAL-2100-2103 for location and arrangement of all internal finishes.
-Floor:	Tray:	38mm deep galvanized tray, finishes as below by others.
	Finish:	Natural Limestone Floor as clause M40/120. Maximum allowed weight of flooring 100kgs. Size: 600 x 400 x 20mm Supplier: Refer to M40/120.
	Finishes to be applied prior to commencement of lift testing.	
- Side Wall (North):	Material:	Full height mirror, either side of COP
	System:	Supported on steel sub-frame to lift manufacturer's design.
	Joints:	No mid-panel joints
- Side Wall (South):	Material:	Shot peened Stainless steel as clause X10/740
	Type:	1.6 mm plate with return edges folded to maximum 3.0mm radius.
	System:	Supported on steel sub-frame to lift manufacturer's design.
	Joints:	Single vertical joint as set out in IRAL-2101.
- Front and Rear walls:	Material:	Shot peened Stainless steel as clause X10/740 to wall panels and to architrave of door openings.
	Type:	1.6 mm plate with return edges folded to maximum 3.0mm radius.
	System:	Supported on steel sub-frame to lift manufacturer's design.
	Joints:	Two vertical joints at door head at door head corners.
- Ceiling:	System:	Suspended, shot peened Stainless steel as clause X10/740. Leading edges of ceiling on 3 sides, inset from wall finishes by 20mm and by 80mm for full length above handrail to provide clearance for ceiling 'drop down' maintenance access.
- Operator Panel:	Location:	Centred 480mm from left hand side on northern side wall, full height panel, with all controls. To sit flush with internal demountable side wall
	Size:	As shown on Drawings IRAL-2100, 2103.
	Finish:	Shot peened as per Z35/153
	System:	Schindler type MX or approved equivalent
	Buttons:	Schindler type MX or approved equivalent. Stainless Steel with tactile designations as follows: Level (-1) 'B' Level (0) 'G' Level (1) 'R' Level (2) '1' Level (3) '2' Level (4) '3'
- Handrails:	Location:	Fixed to southern side wall, running full width, stopping and starting 50mm from front and rear walls per IRAL-2100-2103.
	Size:	42mm diameter
	Material:	Stainless steel Grade 1.4401
	Finish:	Shot peened as per Z35/153
	Ends:	Ends finished flat per IRAL-2100-2103.
	Support:	Handrail fixed to stainless steel brackets fixed to car wall with concealed fixings per IRAL-2100-2103.
- Car Doors:	Material:	Shot peened Stainless steel as clause X10/740

	Joints:	No exposed fixings, no visible joint lines.
	Vision Panels:	Front Facing Doors Low iron toughened glass panels with acoustic Vanceva laminate (colour: 000A, Cool White) Rear Facing Doors Low iron toughened glass panels with acoustic Vanceva laminate (colour: 000A, Cool White) Glass panel as clause Z40/400.
Lighting Location:	Recessed batten	fixed back to cabin framing, adjacent to the suspended ceiling as shown on Drawing IRAL-2100-2103 above the handrail on the southern wall. Luminaire to be fully and continuously enclosed top and both sides. Internal surface of the luminaire enclosure to be painted matt white. Luminaire diffuser to have a minimum utilization factor of 0.4 IRAL luminaire schedule spec code 08F: 1475 mm length, 49W, 4300 lm, product code PJR149PBW / B
Supplier:		**PJR Engineering Ltd** Bourne Works Collingbourne Ducis Nr Marlborough Wiltshire SN8 3EH United Kingdom telephone: +44(0)1264 850763 fax: +44(0)1264 850632
- Diffusers:	Location:	Fixed back to cabin framing and aligned with lighting batten above. Diffuser to have a minimum utilisation factor of 0.4. Refer to IRAL 2100-2103.
	Material:	Low iron glass, etched opal finish to be agreed on submission of samples, in shot peened stainless steel frame
- Ventilation:	Location:	Ventilation naturally provided through available joints in framing.

Landing Entrance Finishes:

-General:	Location:	Refer to IRAL-1051-62 for location and arrangement of all landing entrance finishes. Note: Basement doors and frame to provide 60 min. fire protection.
- Doors:	Material:	Shot peened Stainless steel as clause X10/740
	Joints:	No exposed fixings, no visible joint lines.
- Door Frames:	Material:	Shot peened Stainless steel as clause X10/740

- Entrance Architraves:
Location: Architraves to be provided as set out in IRAL- 1054-1062, detailed in IRAL-2103-05, 2110-14 and specified in L20/350 and L20/355 .

	Size:	Site dimensions to be taken post Schindler installation to ensure flush abutment per IRAL set-out drawings listed above..
	Cut-outs:	Cut-outs to be provided at side and overhead section of architraves to accommodate Lift suppliers Landing Operation Panel (LOP) and Landing Indicator Panels (LIP) as set out in IRAL_2103 and lift suppliers drawings.
	Material:	Shot peened Stainless steel as clause X10/740
	System:	Lift manufacturer's standard box architrave sections.
- Threshold sill:	Location:	Sill to be provided as set out in IRAL- 1054, detailed in IRAL-2105, 2110 and specified in L20/360 . Size: Site dimensions to be taken post Schindler installation to ensure flush abutment per IRAL set-out drawings listed above..
	Material:	Shot peened Stainless steel as clause X10/740

Stainless steel door tracks and sills per IRAL 2110-2119 and Lift manufacturers layout drawings.

		For bespoke shot peened sills laid adjacent, refer to L20/360.
- Infill sills:	Location:	Infill sills to be provided by Lift supplier to run between and align with vertical door frames as set out in IRAL-2110-2114.
	Size:	Per IRAL set out and Lift suppliers shop drawings.
	Material:	Shot peened Stainless steel as clause X10/740
- Landing Indicator Panel:	Location:	To all floors (Levels B,G,R,1,2,3). Flush and centred within architrave.
	Size:	As shown on Drawings IRAL-2103,2104
	Finish:	Shot peened as per Z35/153
	System:	Schindler type MX or approved equivalent
- Landing Operator Panel:	Location:	To all floors (Levels B,G,R,1,2,3). Flush and centred within architrave.
	Size:	As shown on Drawings IRAL-2103,2104
	Finish:	Shot peened as per Z35/153
	System:	Schindler type MX or approved equivalent
- Control Panel:	Location:	Right hand side of top floor landing, set behind secondary access door by builder carrying necessary signage.
	Material**/Access Door**:	~~Shot peened Stainless steel door as clause X10/740~~ **Side hung openable MDF access door with internal closure plates (head, cill and jamb), Access door: 18mm MDF Lacquered as M60/140, Colour 001, Route out access door as required to close over COP locks/fixings – confirm on site. Internal Closure plates: MDF or timber to CA approval, site painted to M60/152, Colour 004. Concealed cabinet hinges: 170°+/- opening angle. Hafele 311.93.500 or to CA approval. Sealant as Z22/108. Provide cabinet bumpers on rear of access door to allow door to close against COP behind and flush to adjacent plaster finished wall. Provide anodised(or powder coated to CA approval) aluminium angle (total length 80mm, leg length of 60mm) as pull, mount to edge of door high level. Joinery as Z10, N10/010-020, 600-920.**

	~~Access Door:~~	~~Side-hung openable angle frame to access panel in stainless steel as clause X10/740 Security fixings of agreed type.~~
	Size:	Control panel clear opening minimum 155d x 270w x 2175h, to match height of entrance architrave. Access panel cover door sized to allow unobstructed use of control panel door beyond and finished flush with wall finishes.

Lift Shaft Finishes:

Shaft Walls		
-Type A:	Location:	To the north, south and western faces of the lift shaft
	System:	Dry lined wall type 'P' – K10/170.
	Finish:	Taped and jointed plasterboard
	Fire:	Shaft lining designed to ensure 60min. fire protection of primary steelwork is maintained.
Type B:	Location:	To the north, south and west walls of lift pit and to the basement and ground floors of the south wall..
	System:	Lightweight block masonry construction: F10/240
	Finish:	Unfinished.
Type C:	Location:	The east wall.
	System:	Existing masonry to be cleaned and made good with all openings infilled with masonry adequate to provide a smooth shaft face aligned with adjacent surface.
	Finish:	Unfinished.

Branding: No visible logos or branding to be included on lift car, landing doors or thresholds, with exception of digital indicator panel at Operator Panel.

SAMPLES

100 PRODUCT SAMPLES

- General: At an agreed stage during detailed design and prior to procurement of the components, the Contractor to provide the CA with 1 No. of each of all visible components, finishes and materials, including all relevant trade literature and technical specifications and obtain acceptance before proceeding with procurement.
  In a discrete location, all samples to be labelled with a unique identification code number, dated and including full contact details.
  Provide a schedule of samples, confirming the exact specification of all materials, products and finishes.
  The samples to allow the assessment of the visual appearance of the Contractor's proposed materials, finishes and products.
- Type: Provide acceptance samples of all elements/ components and associated elements including the following non-exclusive list for lift type 010.
  - Shot peened stainless steel panel, 1 no. minimum of each thickness. Each to include 1 No. 90 degree fold.
  - All non-shot peened steel cladding.
  - Painted steel support structure sample.
  - Threshold sill.
  - Mirror
  - Diffuser for light fitting.

- Fixings.
- Glass.
- Indicator faceplate.
- Ironmongery for control panel access door.
- Stone floor.

- Size: Full size or at least 300 x 300mm for each element as appropriate.

DESIGN/PERFORMANCE REQUIREMENTS

450 SAFETY

The finished surfaces of cladding in all accessible internal and external areas must not:
Have any irregularities capable of inflicting personal injury.
Release irritant or staining substances.

PRODUCTS AND FINISHES

700 METALWORK

Strictly in accordance with Z11.

701 FASTENING AND ADHESIVES

Strictly in accordance with Z20.

735 FIXING ANCHORS

- To be of dimensions not less than recommended by their manufacturers.
- Capable of adequate three-dimensional adjustment to accommodate building structure and curtain walling fabrication/installation tolerances.

740 VISUALLY EXPOSED STAINLESS STEEL CLADDING

Drawing Reference:	IRAL-2100-03 for internal elevations of lift cars.
Material:	Stainless Steel full height panels.
Grade:	304
Finish:	Controlled Shot Peened to Z35/153
Joints:	as shown on Drawings.
Fixings:	Countersunk stainless steel security fixings at equal spacing (Resistorex or equivalent). Fixings to line up across joints. Layout to be accepted by the CA.
Requirement:	All panels accessible by the public to be demountable and individually replaceable.

750 CABIN PANELS/FACINGS AND PERIMETER ACCESSORIES

These must be manufactured and finished to not more than ± 1mm deviation in size, ± 1mm deviation in flatness from the plane per 2m length.
Adequately rigid to comply with all design/performance requirements.

770 GENERAL SEALANTS

These must be stable and compatible with all contact products and finishes and be selected in accordance with BS 6213 from:
Silicone to BS 5889.
One part polysulphide to BS 5215.
Two part polysulphide to BS 4254.
One or two part polyurethane.

787 PROTECTIVE COATING OF MILD STEEL FRAMING SECTIONS/REINFORCEMENT

All surfaces must be painted in protective coating primer and final coat: Colour 003 as M60/110 unless otherwise noted.

790 PROTECTIVE COATING OF MILD STEEL MECHANICAL FIXINGS

All surfaces must be hot dip galvanized to BS EN ISO 1461.

792 POWDER COATING

As section Z31.

795 SHOT PEENING

All shot peening strictly in accordance with Z35.

FABRICATION AND INSTALLATION

810 GENERALLY

Fabricate and install cladding/panels/glazing and all finishes at cabin and landing in accordance with this Specification and the final detailed drawings.
Fabricators and installers must employ competent operatives. Records of their experience are to be provided to the CA on request.
Select and align all products to ensure uniformity of appearance.
Joints must only occur at positions indicated on final detailed drawings.
Isolate dissimilar metals to prevent electrolytic corrosion.
All fixings must be concealed unless indicated on final detailed drawings. Where exposed they must match the material and finish of the products fixed.
Machine cut and drill all products in the workshop wherever possible.
Mark or tag all products to facilitate identification during assembly, handling, storage and installation. Do not mark surfaces visible in the complete installation.

911 INSTALLATION TOLERANCES

± 3mm in positioning.

912 METALWORK

As section Z11, unless specified otherwise in this section.

917 FIXINGS/ADHESIVES APPLICATION

As section Z20, unless specified otherwise in this section.

920 SEALANT APPLICATION

As section Z22, unless specified otherwise in this section.

930 ASSEMBLY

Carry out as much assembly as possible in the workshop.
Joints, other than movement joints, must be rigidly secured, reinforced where necessary and fixed with hairline abutments.
Take precautions to prevent displacement of components in assembled units.
Obtain acceptance for any reassembly on site.

935 INSPECTION

All fabrications and assembled units must be carefully inspected for match with accepted samples and for compliance with this Specification and the final detailed drawings before dispatch to site.
Give adequate notice of inspection arrangements to enable the CA and/or other affected parties to be present.

940 PROTECTION

All fabrications and assembled units must be protected against damage, corrosion and disfigurement during handling, installation and subsequent site operations.
Protective coverings must be applied before dispatch to site and must not be detrimental to cladding products, finishes or installation procedures.

945 HANDLING AND STORAGE

Do not deliver to site any cladding products and units which cannot be installed immediately or unloaded into a suitable well protected storage area.

Store products and units on level bearers clear of the ground and separate with resilient spacers.

975 IN SITU WELDING

Not permitted.

985 DAMAGE

Do not repair internal cladding or glazing without acceptance. Such acceptance will not be given where products and units are badly damaged or where the proposed repair will impair performance or appearance.

Schedule repairs or record on drawings for inclusion in the maintenance manual.

990 CLEANING

At Practical Completion or when otherwise agreed with the CA, remove any protective coverings and thoroughly clean external and internal cladding areas. Cleaning agents for the purpose must be accepted by the cladding manufacturer and incorporated products manufacturers.

995 MAINTENANCE

Prepare a maintenance manual in accordance with the Preliminaries. Unless otherwise instructed or agreed the manual must be completed and handed over to the CA at Practical Completion.

End of X10