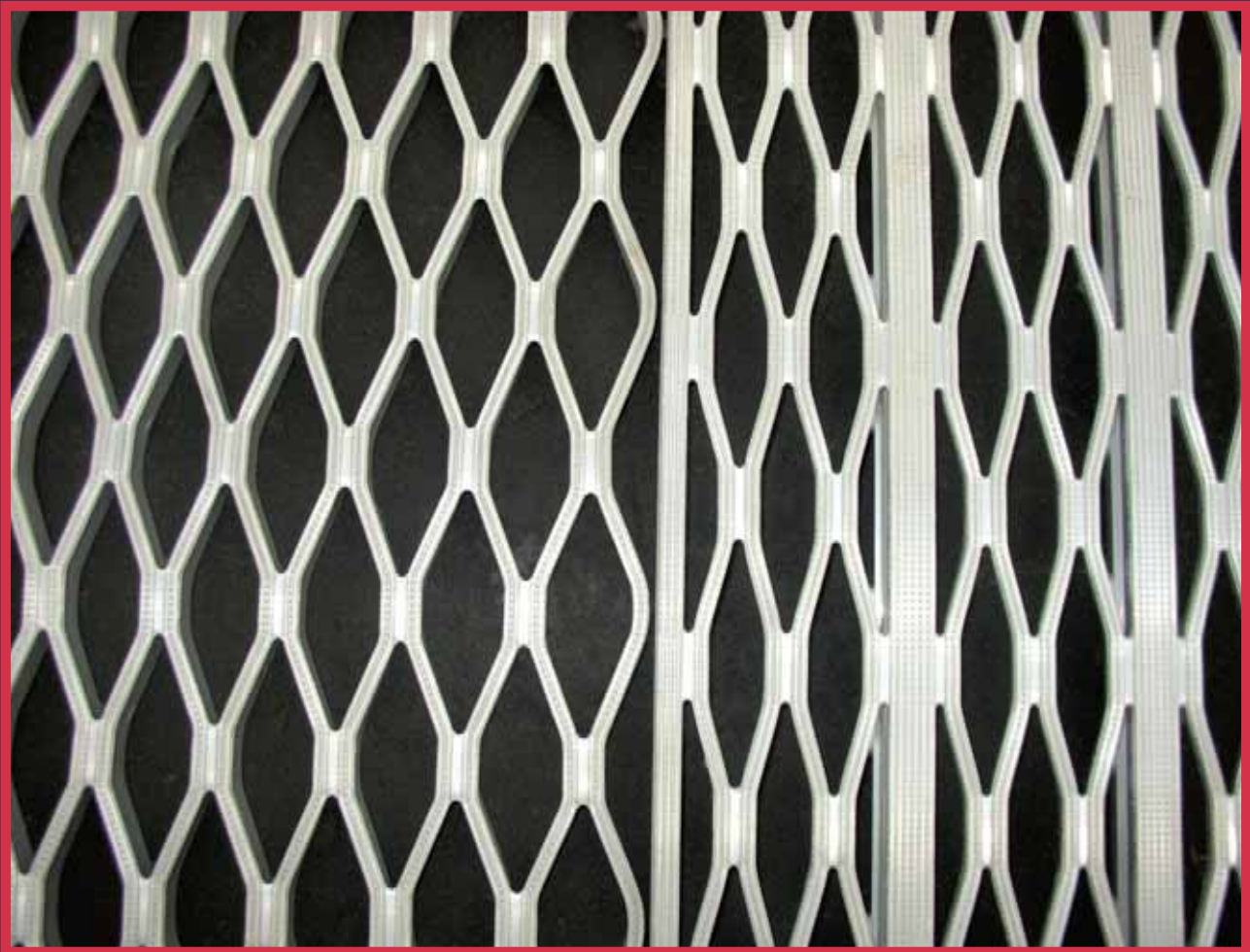


SERIES - 13/22/30/40





EXPERIENCE:

- Ullrich Aluminium has over 20 years experience in Design/Extrusion/Distribution of aluminium in Australia, New Zealand and the Pacific Islands. We pride ourselves on our excellent designs, technical advice and after sales service.

DESIGN:

- The Ullrich Aluminium Grating has been designed to meet the requirements of Australian Standards AS1657-1992

FEATURES:

- Lightweight
- Suitable for corrosive environment
- High resistance to slip
- Easily machined and fabricated
- Readily available via our national distribution outlets



USES:

- Walkways on roofs
- Platforms (work, marine)
- Roof A/C platforms
- Pit grating for Wastewater Treatment plants
- Stair treads

MATERIAL:

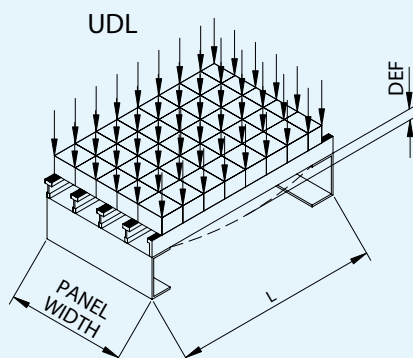
- All Ullrich grating and stair tread is manufactured from Aluminium Alloy 6063 T5

SPECIFY:

- The grating panels shall be fabricated using Ullrich Aluminium Grating series (select) and designed to comply with Australian Standard AS1657 – 1992. Fabricate/install according to Ullrich recommendation.

PANEL LOADING:

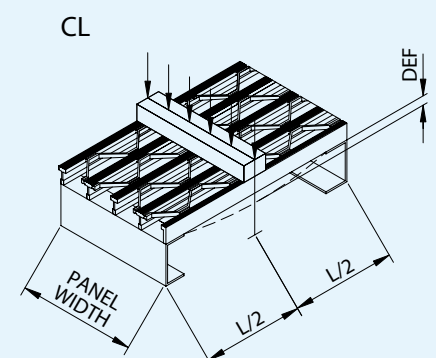
- The diagrams below are a graphical interpretation of panel loading shown in the safe load tables.



UDL = SAFE UNIFORMLY DISTRIBUTED LOAD (kpa)

DEF = DEFLECTION (mm) LIMITED TO SPAN/200

CL = CONCENTRATED LOAD (kn) SPREAD OVER WIDTH OF THE PANEL



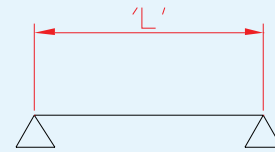
PANEL SPECIFICATIONS

SERIES	length (mm)	width (mm)	weight (kg)	apertures
UWG13 	6000 +50 -0	600 ±3	28.0 kg/panel 7.756kg/m ²	
UWG22 	6000 +50 -0	600 ±3	35.0 kg/panel 9.757kg/m ²	

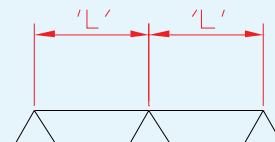
SERIES 13 & 22

SAFE LOAD TABLES

PANEL		SPAN 'L' (mm) - SINGLE					
		500	600	700	800	900	1000
UWG13	UDL (kpa)	4.8	2.8	1.6	0.9	0.6	
	DEF (mm)	2.5	3.0	3.5	4.0	4.5	
UWG22	UDL (kpa)	9.4	6.3	4.2	2.9	2.1	1.5
	DEF (mm)	2.5	3.0	3.5	4.0	4.5	5.0



PANEL		SPAN 'L' (mm) - DOUBLE					
		500	600	700	800	900	1000
UWG13	UDL (kpa)	6.7	3.9	2.2	1.3	0.8	
	DEF (mm)	2.5	3.0	3.5	4.0	4.5	
UWG22	UDL (kpa)	13.0	8.8	5.9	4.1	2.9	2.1
	DEF (mm)	2.5	3.0	3.5	4.0	4.5	5.0



NOTE:

- * LOADS SHOWN IN SHADED AREA COMPLIES TO AS1657 WITH DEFLECTION OF SPAN/200
- * FOR PEDESTRIAN TRAFFIC A 'UDL' OF 2.5KPA (min) IS REQUIRED



TYPICAL APPLICATION OF ROOF WALKWAY WITH HANDRAIL



PANEL SPECIFICATIONS

SERIES	length (mm)	width (mm)	weight (mm)	apertures
UWG30 	6000 +50 -0	500 ±3	46.7 kg/panel 15.56kg/m ²	
UWG40 	6000 +50 -0	500 ±3	51.8 kg/panel 17.27kg/m ²	
UWG40/ST 	6000 +50 -0	250 ±3	30.4 kg/panel 20.27kg/m ²	
UWG30/SL 	6000 +50 -0	250 ±3	28.2 kg/panel 18.8kg/m ²	

SERIES 30 & 40

STAIRTREADS

PANEL WIDTH = 250mm
COMMON SIZES = 614mm, 914mm, 1214mm

DEFLECTION TABLE

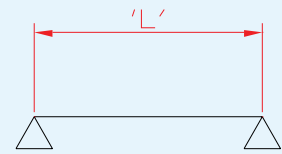
PANEL UWG40/ST	SPAN (mm)			
	750	900	1050	1200
UDL (2.2kn/m)	0.6	1.3	2.5	4.1
CL (1.4kn)	2.5	3.0	3.5	4.0

NOTE:
MAX. RECOMMENDED
LENGTH OF STAIRTREAD
FOR PEDESTRIAN
TRAFFIC = 1214mm

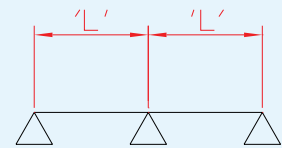


**SAFE LOAD TABLES**

PANEL UWG30	SPAN 'L' (mm) - SINGLE											
	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
UDL (kpa)	22.9	13.2	8.3	5.6	3.9	2.9	2.1	1.7	1.3	1.0	0.8	0.7
DEF (mm)	3.8	4.7	5.2	6.0	6.7	7.5	8.3	9.0	9.7	10.5	11.3	12.0
CL (kn)	5.1	3.7	2.7	2.1	1.7	1.3	1.1	0.9	0.8	0.7	0.6	0.5
DEF (mm)	3.6	4.5	5.2	6.0	6.7	7.5	8.3	9.0	9.7	10.5	11.3	12.0



PANEL UWG30	SPAN 'L' (mm) - DOUBLE											
	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
UDL (kpa)	27.0	18.8	13.8	10.6	8.3	6.8	5.6	4.3	3.4	2.7	2.2	1.8
DEF (mm)	1.7	2.5	3.3	4.4	5.5	6.8	8.3	9.0	9.7	10.5	11.3	12.0
CL (kn)	6.8	5.6	4.8	4.3	3.7	2.8	2.4	2.0	1.7	1.5	1.3	1.1
DEF (mm)	2.2	3.2	4.4	5.7	6.7	7.5	8.3	9.0	9.7	10.5	11.3	12.0

**NOTE:**

- * LOADS SHOWN IN SHADED AREA COMPLIES TO AS1657 WITH DEFLECTION OF SPAN/200
- * FOR PEDESTRIAN TRAFFIC A 'UDL' OF 2.5KPA (min) IS REQUIRED

PANEL UWG40	SPAN 'L' (mm) - SINGLE											
	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
UDL (kpa)	45.5	29.7	18.7	12.5	8.8	6.4	4.8	3.7	2.9	2.3	1.9	1.6
DEF (mm)	3.3	4.5	5.2	6.0	6.7	7.5	8.3	9.0	9.7	10.5	11.3	12.0
CL (kn)	8.5	7.1	6.1	4.7	3.7	3.0	2.5	2.1	1.8	1.5	1.3	1.2
DEF (mm)	2.7	3.8	5.2	6.0	6.7	7.5	8.3	9.0	9.7	10.5	11.3	12.0

PANEL UWG40	SPAN 'L' (mm) - DOUBLE													
	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2770
UDL (kpa)	45.5	31.6	23.2	17.8	14.0	11.4	9.4	7.9	6.7	5.8	5.0	4.1	3.4	2.9
DEF (mm)	1.3	1.8	2.5	3.3	4.1	5.1	6.2	7.3	8.6	10.0	11.3	12.0	12.7	13.5
CL (kn)	11.3	9.4	8.1	7.0	6.2	5.7	5.2	4.5	3.8	3.2	2.8	2.5	2.2	2.0
DEF (mm)	1.7	2.3	3.2	4.3	5.4	6.7	8.3	9.0	9.7	10.5	11.3	12.0	12.7	13.5

PANEL UWG30SL	SPAN 'L' (mm) - SINGLE											
	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
UDL (kpa)	38.7	28.4	14.1	9.5	6.6	4.8	3.6	2.8	2.2	1.8	1.4	1.2
DEF (mm)	3.8	4.5	5.2	6.0	6.7	7.5	8.3	9.0	9.7	10.5	11.3	12.0
CL (kn)	4.5	3.2	2.3	1.8	1.4	1.1	0.9	0.8	0.7	0.6	0.5	0.4
DEF (mm)	3.8	4.5	5.2	6.0	6.7	7.5	8.3	9.0	9.7	10.5	11.3	12.0

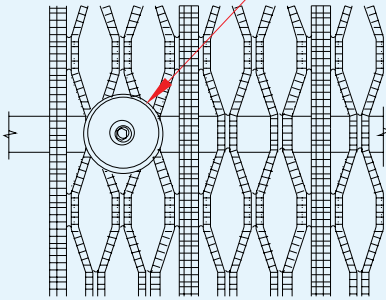
PANEL UWG30SL	SPAN 'L' (mm) - DOUBLE													
	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2770
UDL (kpa)	48.1	33.4	24.5	18.8	14.8	12.0	9.5	7.3	5.7	4.6	3.7	3.1	2.6	2.2
DEF (mm)	1.8	2.6	3.6	4.7	5.9	7.3	8.3	9.0	9.8	10.5	11.3	12.0	12.7	13.5
CL (kn)	5.6	4.7	4.0	3.5	3.1	2.6	2.1	1.8	1.5	1.3	1.2	1.0	0.9	0.8
DEF (mm)	2.0	2.9	4.0	5.2	6.6	7.5	8.3	9.0	9.7	10.5	11.3	12.0	12.7	13.5



PANEL FIXING METHODS

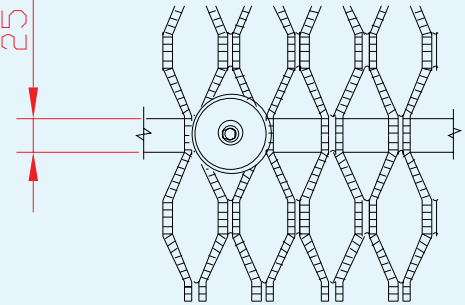
30/40 SERIES GRATING

UWS007 RETAINING DISC WITH UWS009 TEK SCREW 12-14x45

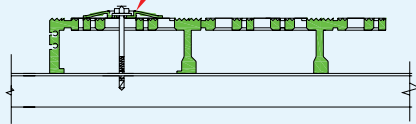


13/22 SERIES GRATING

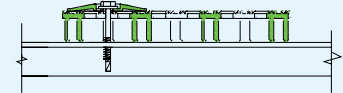
25 MIN.



UWS007 RETAINING DISC

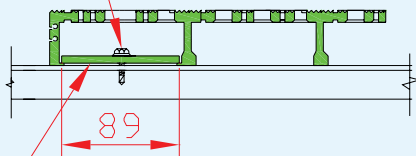


UWS009 TEK SCREW



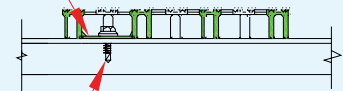
TYPICAL METHOD

TEK SCREW 12-14x20LG



50x6 FLAT CUT 89LG DRILL DIA.9 HOLE AT CTR.

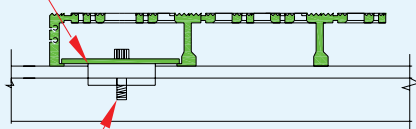
WELD 3mm THK. PLATE IN APERTURE DRILL DIA.7 HOLE AT CENTRE



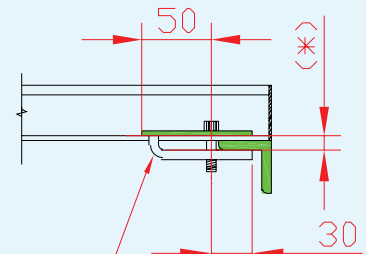
TEK SCREW 12-14x20LG

CONCEALED METHOD

80x6 FLAT CUT 89LG DRILL DIA.9 HOLE AS SHOWN



SOCKET HD. CAP SCREW M8x30LG



CLAMP 50x6 FLAT DRILL AND TAP M8 SEE NOTE (*)

CLAMPED METHOD

FASTENERS COMMONLY USED

- * M8 HEX. HD. BOLT/NUT/FW. GRADE 316SS
- * ALL TEK SCREWS CLASS 4 FINISH
- * 14-14 HEX HD. TYPE T.T THREAD FORMING SCREW. GRADE 304SS
- * FIXING TO WOOD - 14-10 HEX. HD. TEK SCREW. TYPE 17 GRADE 304SS

NOTE: (*) BEND CLAMP TO SUIT THICKNESS BEING CLAMPED PLUS 4mm



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