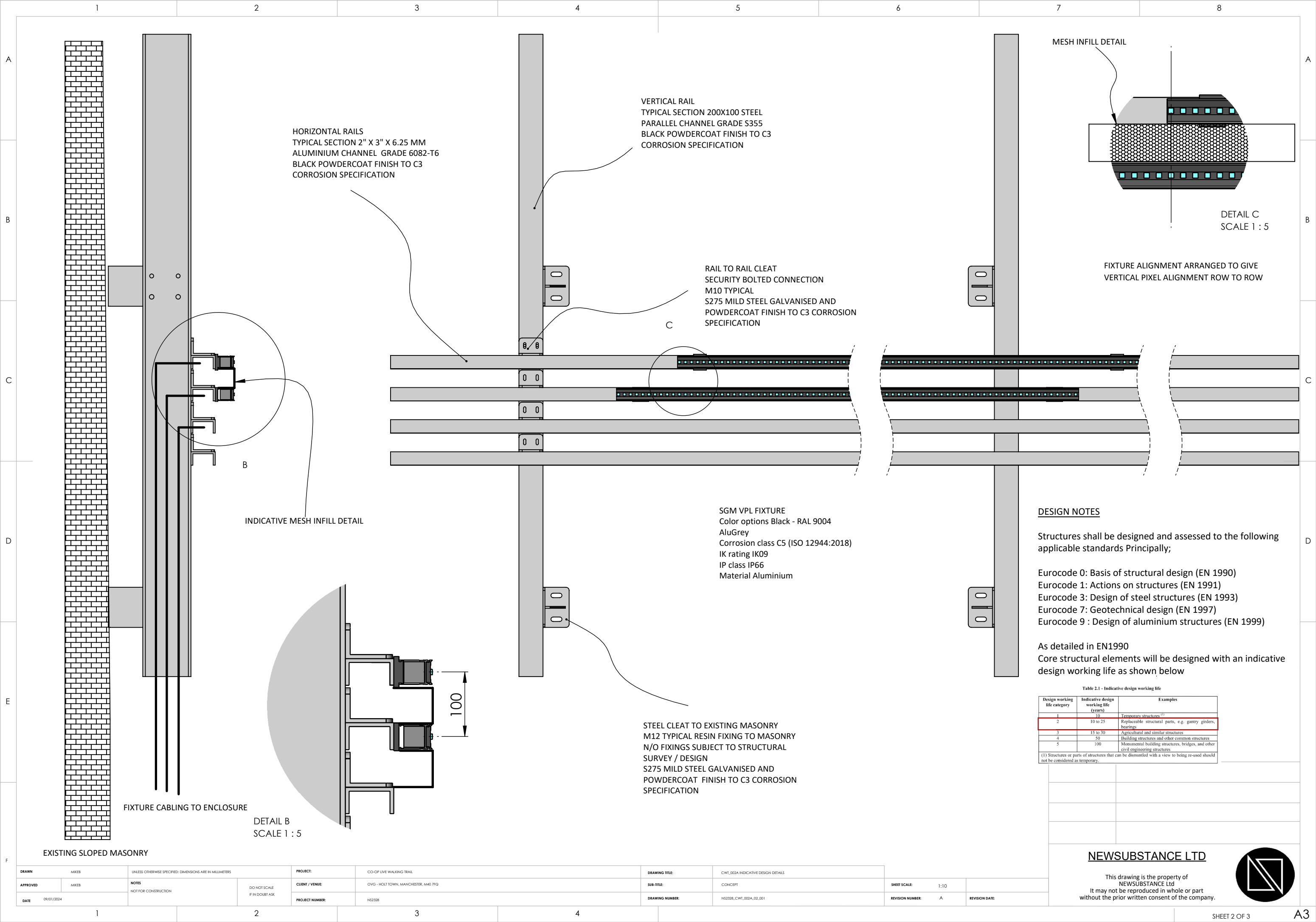




DESIGN NOTES

Structures shall be designed and assessed to the following applicable standards Principally;

Eurocode 0: Basis of structural design (EN 1990)
Eurocode 1: Actions on structures (EN 1991)
Eurocode 3: Design of steel structures (EN 1993)
Eurocode 7: Geotechnical design (EN 1997)
Eurocode 9 : Design of aluminium structures (EN 1999)

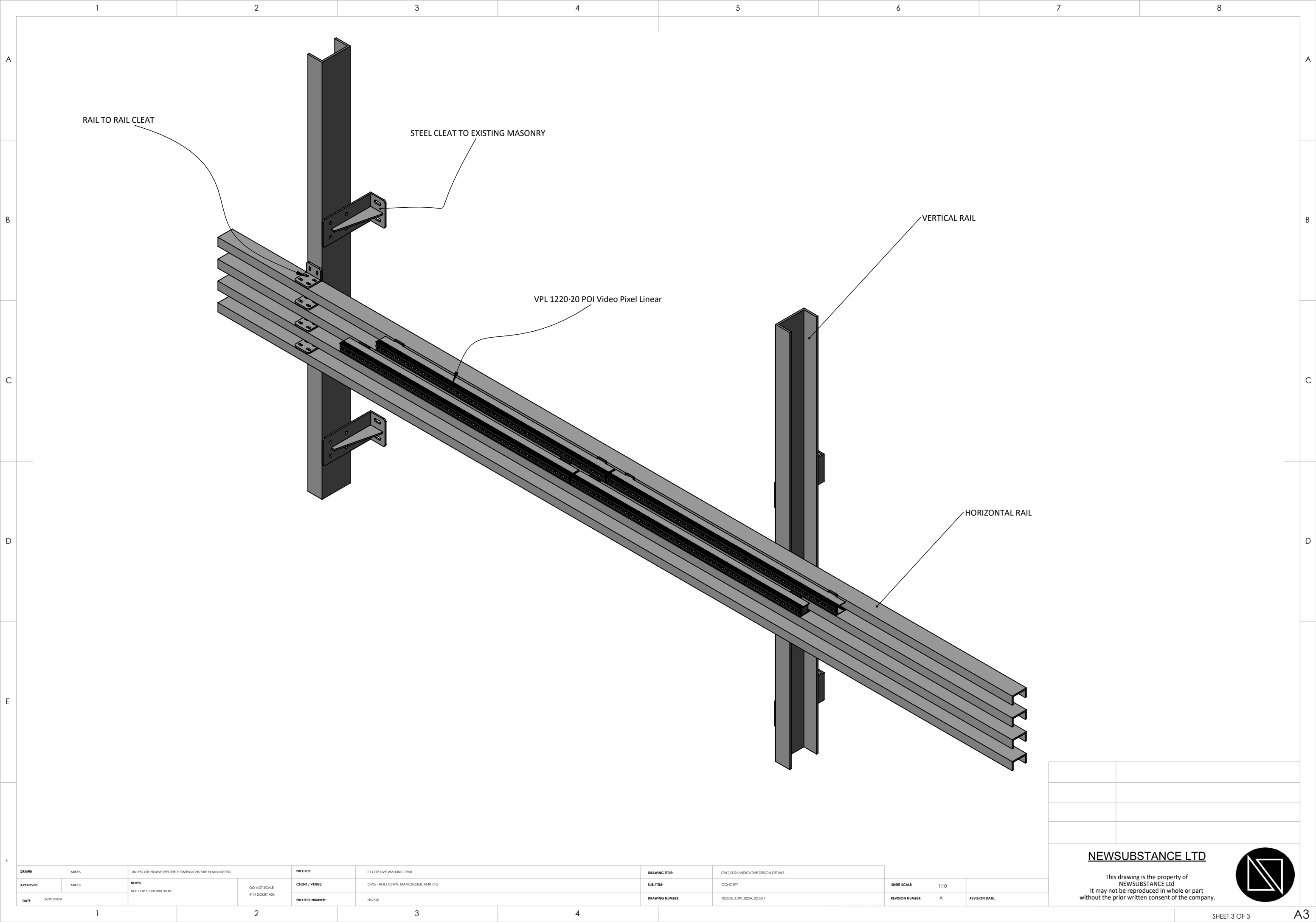
As detailed in EN1990
Core structural elements will be designed with an indicative design working life as shown below

Table 2.1 - Indicative design working life		
Design working life category	Indicative design working life (years)	Examples
1	10	Temporary structures ⁽¹⁾
2	10 to 25	Replaceable structural parts, e.g. gantry girders, bearings
3	15 to 30	Agricultural and similar structures
4	50	Building structures and other common structures
5	100	Monumental building structures, bridges, and other civil engineering structures
(1) Structures or parts of structures that can be dismantled with a view to being re-used should not be considered as temporary.		

NEWSUBSTANCE LTD

This drawing is the property of
NEWSUBSTANCE Ltd
It may not be reproduced in whole or part
without the prior written consent of the company.







VPL 1220-20 POI

Video Pixel Linear



Description

The VPL 1220-20 is a video pixel linear designed to create powerful pixel mapping and media effects. It is a powerful and versatile tool for linear and radial installations where high-visibility and a very flexible setup are essential. This easily integrated fixture is suitable for a wide range of applications, including media façades, touring concerts, stadiums, theme parks or just about any fixed or temporary tight space installation. The VPL series are available in different lengths with multiple accessories like Opal lenses, brackets, and extension cables.

Features and benefits

- ✓ IP66-rated Video Pixel Linear luminaire
- ✓ Power and data in one cable with no need for external power supplies
- ✓ 1212 millimeter length per luminaire with integrated power supply
- ✓ Auto or individual addressing
- ✓ 64 Quad Full-Color LED Pixel Clusters (256 Full-ColorLEDs per unit)
- ✓ Long runs on a single circuit
- ✓ 19.05 mm pixel pitch and 120° viewing angle
- ✓ IK09-rated, UV and C5 corrosion resistant
- ✓ 16 bit control, Real time remote monitoring

Certifications & classifications

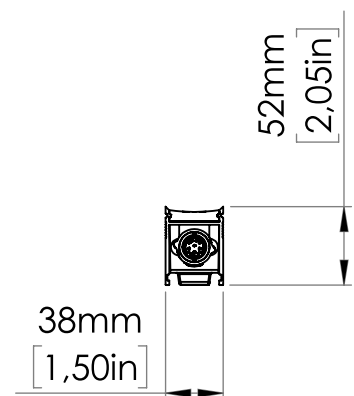
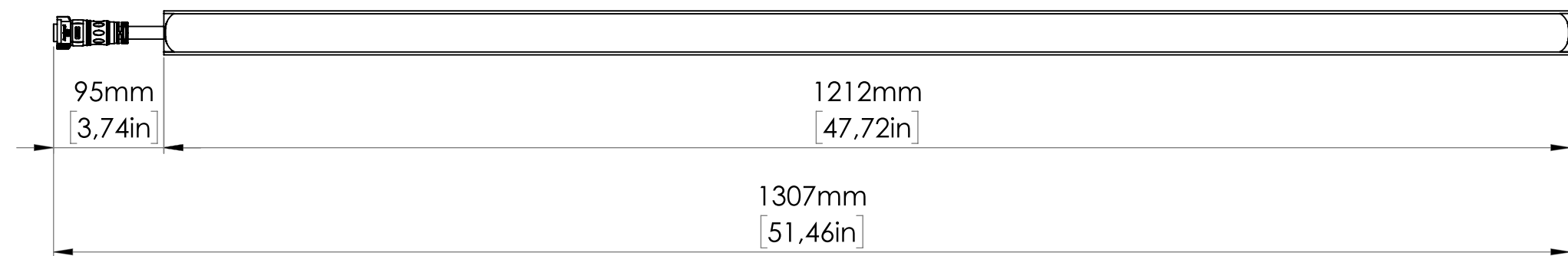
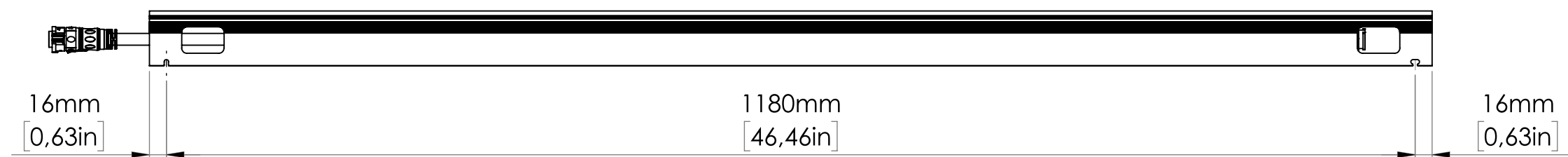
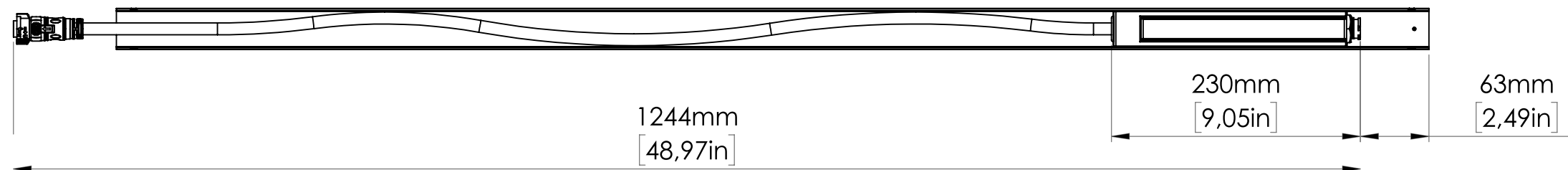
IP66
INGRESS

RoHS
COMPLIANT

CE



C5
CORROSION



Specification

Optical Data	LED expected lifetime	50,000 hours
	Lightsource	256 x high-power RGB LEDs
	Native lens options	110°
	Pixel per meter	52 px/m
	Pixel pitch	19.05 mm
	Pixel size	6 x 6 mm Quad LED Pixel Clusters
Photometric	Color temperature range	2000K - 10000K
	Efficacy	33 lm/W
	Light output all LEDs on	810 lm
	Lumen per kilogram	506 lm / Kg
	Luminance	8400 Nits (cd/m2) 8400 nits (modular spacing 38mm)
	Luminance efficacy	10.14 Nits/W
	Native beam angle(s)	109° (with clear 110° lens)
	Native field angle(s)	151° horizontal, 158° vertical (with 110° clear lens)
Physical	Color options	Black - RAL 9004 AluGrey
	Corrosion class	C5 (ISO 12944:2018)
	Effective Projected Area	0.68 Square ft
	IK rating	IK09
	IP class	IP66
	Material	Aluminium
	Net dimensions L x H x W	1212 x 52 x 38 mm
	Net dimensions L x H x W (inches)	47.8 x 2 x 1.5 inches
	Net weight	1.6 kg (3.5 lbs)
	Vibration Rating	3G
Features	Addressable pixels	64
	Auto addressing	Yes
	Color calibration	SGM proprietary, full color calibration White calibration for RGB
	Dimming	Smooth fade in, gamma corrected curve
	On-fixture test	Yes
	Other	LED frequency control via SGM Network Admin
	Remote monitoring	Yes (Real Time)

	View angle	120°
Electrical	Electrical protection	Overload protection with automatic recover
	Input voltage, absolute max. rating	185 -264 VAC; 50 / 60 Hz
	Input voltage, nominal	200 - 240 VAC; 50 / 60 Hz
	Max inrush current 230VAC	1.9 A
	Max power consumption	35 W
	Power factor	0.98 PF (230 V)
	Power per meter	29 W/m
	Power Supply Unit	Auto-ranging electronic switch-mode
	Standby power consumption	2.8 W
Programming and Control	16-bit control	Red, Green, Blue
	Data communication	100 Mb
	Data distribution	SGM Power and Data Joiner
	DMX channels	3, 6, 12, 24, 48, 96, 192 or 384
	DMX modes	8
	Protocol	Art-Net (up to 120 Hz) sACN SGM VP-Net
	Setting and addressing	SGM Network Administrator
Connections	Data / Power input	Multicore 8 pin cable 1xShield, 2xPower, 4xSignal
	Data / Power output	Multicore 8 pin cable 1xShield, 2xPower, 4xSignal
	Power cable diameter	11mm ±0,3mm
Installation	Orientation	Any
	Rigging possibilities	Hanging / horizontal mounted or ceiling / wall mount (optional)
Thermal	Cooling	Passive
	Humidity (max.)	98 %
	Temperature range, operating	-20°C to 60°C
	Temperature range, operating max	60 °C
	Temperature range, operating min	-20 °C
	Temperature range, start-up	-20°C to 60°C
	Temperature range, storage	-40°C to 80°C
	Thermal protection	Automatic overtemperature protection
	Total heat dissipation, max power	119.4 BTU per hour
	Total heat dissipation, standby	9.6 BTU per hour

Included items

Included items

Safety instructions and installation
quick guide**Conforms To**

CE - 2014/30/EU: EMC Directive

EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
EN 55032
EN 55035CE - 2014/35/EU: Low Voltage
DirectiveEN 60598-1
EN 60598-2-17
EN 62471
EN 60529
EN 62368-1

RoHS2 Directive

2011/65/EU

UL

UL Std. 1573

Certified To

CSA

CSA-E598-2-17-98, Ed: 1
CSA E60598-1, Ed: 3

Ordering information

Qty	Product name	Item number
☐	VPL1220-20, POI, AG	80080053
☐	VPL1220-20, POI, BL	80080058
☐		
Accessories		Item number
☐	VPL Rounded Opal lens	83061074
☐	VP Power Inserter	83062047
☐	VP Touring Power + Data Joiner	83062049
☐	VP Data Redundancy Interface	83062048
☐	VPL Single installation bracket	83060634
☐	VPL Dual installation bracket	83060635
☐	VP Extension cable	83062051
☐	VP Connector End cap	83062056
☐	SGM Network Admin	
☐	VP Power + Data Joiner	83062046
☐	VPL Smoked clear lens	83061079
☐	GND/Earth wire for VPL, 1m	83062050
☐	VPL Opal / Black lens	83061083
☐	VPL Smoked Frosted lens	83061087
☐	VPL Rounded Smoked Opal lens	83061091
☐	VP Extension cable, 1m	83062051
☐	VP Extension cable, 2.5m	83062052
☐	VP Extension cable, 5m	83062053
☐	VP Custom Extension cable Kit, 1m	83062054
☐	VP Custom Extension cable Kit, 10m	83062055
☐	PDM - Power & Data Manager	80070240
☐		



Headquarter [+45 70 20 74 00](tel:+4570207400)

Mail info@sgmlight.com

Website sgmlight.com