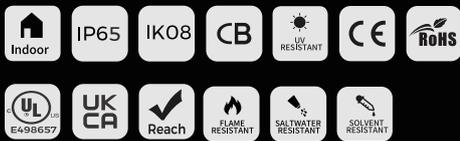# COLORS®

POSE-ABLE 360 Series | Specification

NNR25P

—

| Indoor | IP65 | IK08 | CB | UV RESISTANT | CE | RoHS |

| UL E498657 | UKCA | Reach | FLAME RESISTANT | SALTWATER RESISTANT | SOLVENT RESISTANT |
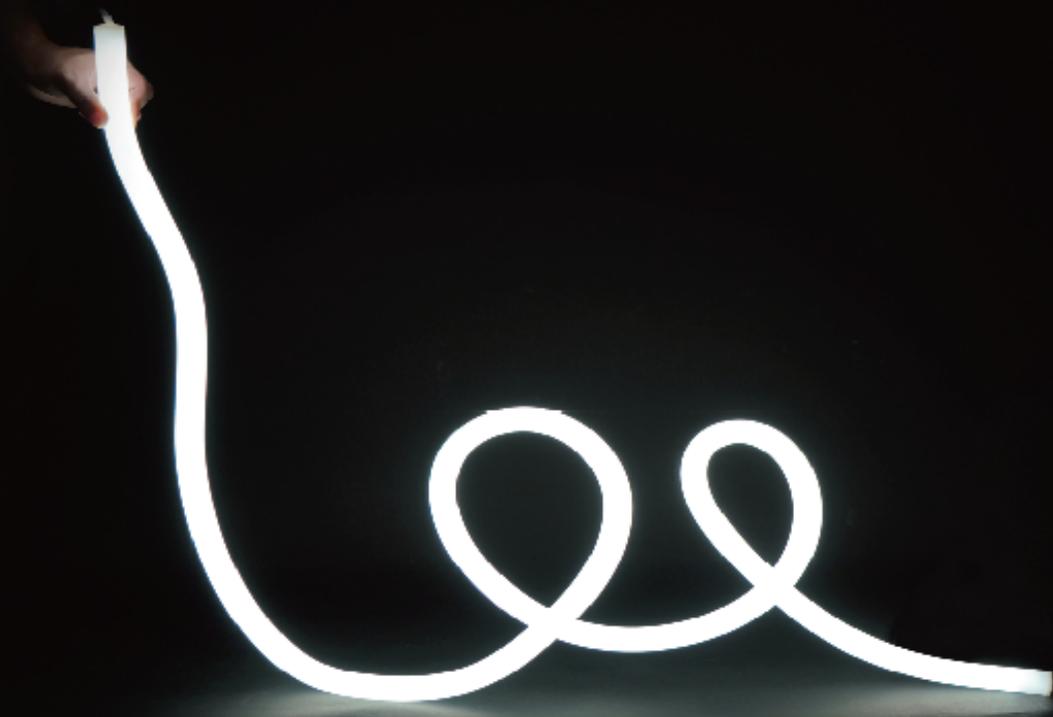
【Features】

· Light source: High-efficiency COF light strip, LM80 test certification;

· Process material: high light transmittance, high purity silica gel material, IP65 protection level;

· Optical design: unique optical light distribution structure design, dark areas on head and tail;

· Appearance design: Can be rigid, can be flexible, strong plasticity;

· Product certification: UL, CE, ROHS, UKCA, CB;

· Environmental characteristics: salt solution resistance, acid and alkali corrosion resistance, flame retardant resistance, UV resistance;

· Working/storage temperature: Ta: -25~55℃ / 0℃～60℃;

· Product application: office lighting, decorative lighting, artistic lighting, modeling contrast;

· Warranty:**Indoor**:5 years warranty or working life =60000H,whichever comes first;

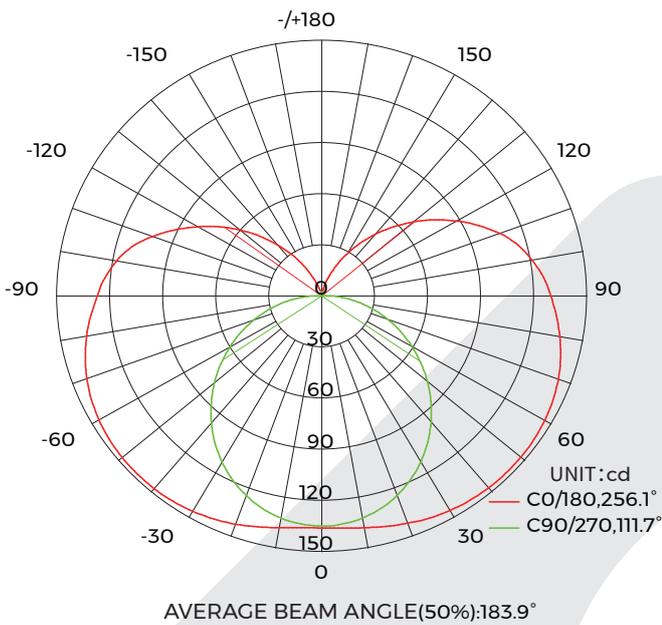　　　　**Semi-outdoor**:3 years warranty or working life =36000H,whichever comes first.
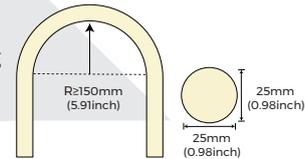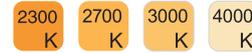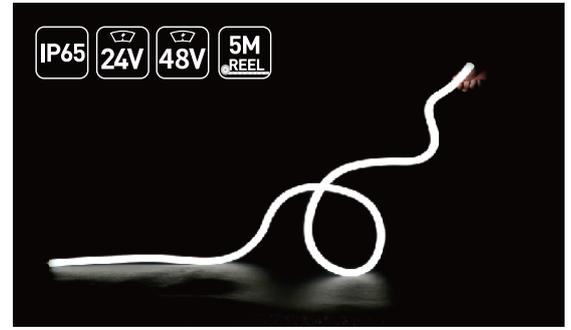
【Basic Parameters】

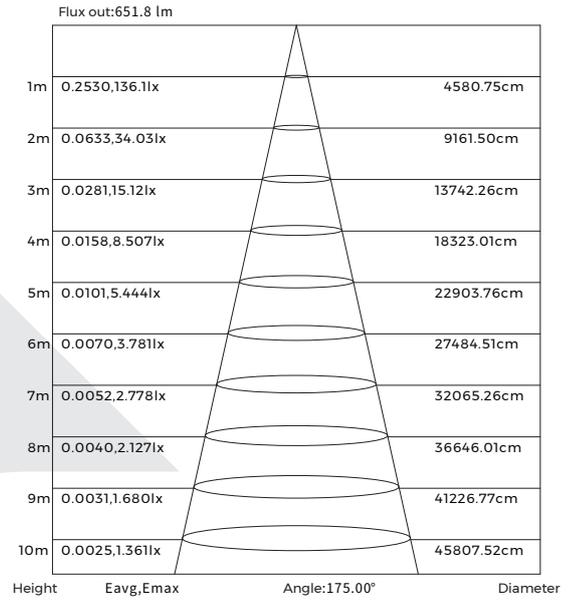| Model	CCT/colors	Color range	CRI	Input voltage (V)	Rated current (A/m)	Rated power (w/m)	Maximum power (w/m)	Lumens (LM/m)	Standard Length	Remark
NNR25P -9XX24CSN050CC0500 -ESD	2300K	2150-2350K	>90	24V	0.83 (0.25A/ft)	20 (6.08W/ft)	22.4 (6.83W/ft)	920(280/ft)	5000mm (16.4ft)	No cutting (29.4mm)
	2700K	2450-2750K						1100(335/ft)		
	3000K	2750-3150K						1180(359/ft)		
	4000K	3700K-4400K						1140(347/ft)		
NNR25P -9XX48CSN050CC0500 -ESD	2300K	2150-2350K	>90	48V	0.42 (0.13A/ft)	20 (6.08W/ft)	22.4 (6.83W/ft)	760(231/ft)	5000mm (16.4ft)	No cutting (33.3mm)
	2700K	2450-2750K						930(283/ft)		
	3000K	2750-3150K						1000(304/ft)		
	4000K	3700K-4400K						960(292/ft)		

Note:

1. The above parameters are tested based on 1m (3.28ft) standard products;

2. The luminous flux is allowed to have an error range of ±15%;

3. The above parameters are typical values;

【Light Distribution】

Flux out:651.8 lm

-/+180

-150　　150

-120　　120

-90　　90

0

30

60

90

120

150

0

-60　　60

-30　　30

UNIT:cd
— C0/180,256.1°
— C90/270,111.7°

AVERAGE BEAM ANGLE(50%):183.9°

Light distribution

Height	Eavg,Emax	Angle:175.00°	Diameter
1m	0.2530,136.1lx		4580.75cm
2m	0.0633,34.03lx		9161.50cm
3m	0.0281,15.12lx		13742.26cm
4m	0.0158,8.507lx		18323.01cm
5m	0.0101,5.444lx		22903.76cm
6m	0.0070,3.781lx		27484.51cm
7m	0.0052,2.778lx		32065.26cm
8m	0.0040,2.127lx		36646.01cm
9m	0.0031,1.680lx		41226.77cm
10m	0.0025,1.361lx		45807.52cm

Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.
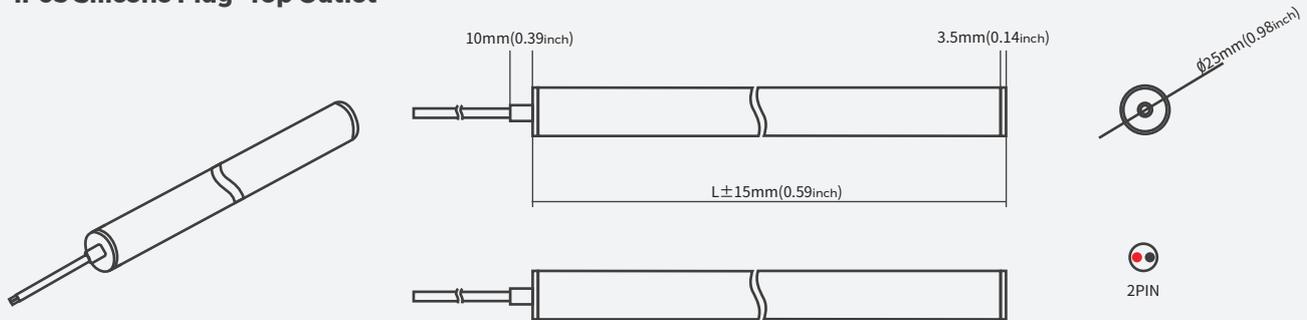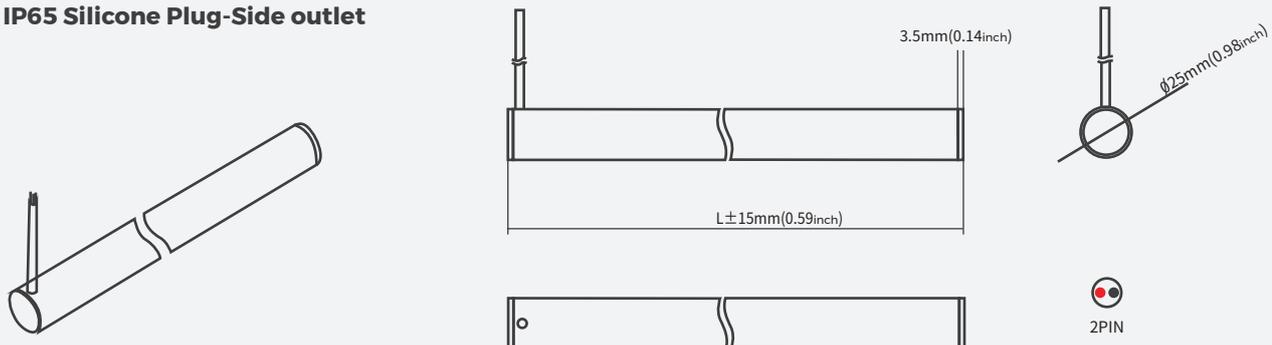
Effective average illuminance

Note: The above data is based on 24V monochrome 3.000K color temperature. If you need other models of IES files, please download the corresponding models from the IES database.
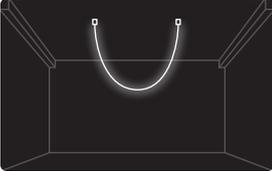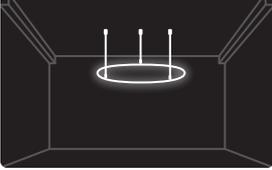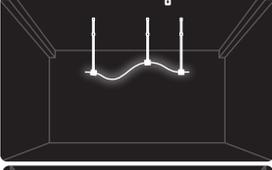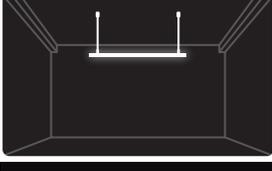
【Product mechanical parameters】

· IP65 Silicone Plug -Top Outlet

10mm(0.39inch)　　3.5mm(0.14inch)

Ø25mm(0.98inch)

L±15mm(0.59inch)

2PIN

· IP65 Silicone Plug-Side outlet

3.5mm(0.14inch)

Ø25mm(0.98inch)

L±15mm(0.59inch)

2PIN

【Accessory information】

Installation schematic	Accessories Picture	name	Order model	quantity/ case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Gross weight (mm)	Remark
/		NNR25 ceiling Fixed installation components	AS-NNR25P1-25	100	0.01	1.00	1.20	250*250*150	size：L25*W51.6*H27.8mm , With screws; 3pcs/1M;5pcs/2.5M;8pcs/5M
		Double-ended vertical ceiling Kits	AS-NNR25VCC1-XX-2	48	0.13	6.05	6.65	365*365*190	NNR25P-XXXXBC0500
		Can be spliced Install components	AS-NNR25DHS-XX	48	0.05	2.30	2.91	365*365*190	NNR25P-XXXXBC0500
		Can be shaped and hoisted Install components	AS-NNR25DHX-0038	15	0.20	3.00	3.62	415*250*230	NNR25P-XXXXBC0500 Round tube L：38mm; escopic rodl L:0.6M Recommended dosage:1PCS/0.5M
		Horizontal hoisting Install components (38mm)	AS-NNR25LHX-0038	96	0.07	6.75	7.35	365*365*190	NNR25-XXXXBC0500 Round tube:38mm; Wire rope 2pcs, L:2M; Recommended dosage:1PCS/0.5M
/		Tail splicing piece (80mm)	AS-NNR25DHX-0080	15	0.21	3.15	3.77	415*250*230	NNR25P-XXXXBC0500 Round tubeL:80mm; escopic rodl ：1pcs, L:0.6M Recommended dosage:1PCS/0.5M
/		Tail splicing piece (80mm)	AS-NNR25LHX-0080	96	0.07	6.75	7.35	365*365*190	NNR25P-XXXXBC0500 Round tubeL:80mm; Wire rope ： 1pcs, L:2M; Recommended dosage:1PCS/0.5M
/		588G acidic glue	AS-PG-0002	150	0.014	2.1	2.4	250*250*150	10ml/pcs
/		NNR25P Plug set	AS-NNR25PGH0-EC	500	0.0004	0.2	1	250*250*150	/
/		NNR25P Plug set	AS-NNR25PGS0-EC	500	0.0004	0.2	1	250*250*150	/

【Accessory information】

| Installation schematic	Accessories Picture	name	Order model	quantity/ case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Gross weight (mm)	Remark
/		Wire	AS-WS-0001	150	0.0154	2.31	2.61	250*250*150	Suitable for monochromatic light strips (Use the top-out line)
/		Wire	AS-WS-0002	125	0.0616	7.7	8	250*250*150	Suitable for monochromatic light strips (Use the top-out line)
/		NNR25 Trimless embedded accessory	AS-NNR25VTD-XX-2	36	0.11	3.96	4.96	410*410*260	Appearance size：φ62*20mm Mounting hole size：φ40mm
/		NNR25 Embedded accessory	AS-NNR25VRD-XX-2	36	0.18	6.48	7.48	410*410*260	Appearance size：φ64*20mm Mounting hole size：φ40mm
/		NNR25 No dark areas accessory	AS-NNR25LHS-0080	48	0.07	3.36	3.96	365*365*190	Suit to NNR25/NNR25P /NNR25BLK (side out wire)

【Product control system solutions】

| Product Image	product name	Product number	Order code	Product specifications	Applicable Products
	Monochrome remote	CK1-GBA	402-02-000000-00001	output signal：RF Working voltage：3VDC(CR2032) Remote control distance：30m Working temperature:Ta:0-30 ℃~0+55 ℃	Monochrome light strip (Use with CR1-GBA)
	Monotone light controller	CR1-GBA	402-01-000000-00001	Input voltage：DC12-48V Output current：15A@12V/24V,10A@36V/48V Output Power：Max 180W@12V/Max 360W @24V/Max 360W@36V/Max 480W@48V Working temperature：-30℃— +55℃	Monochrome light strip (Use with CR1-GBA)

【Packaging Solutions】

· standard packaging

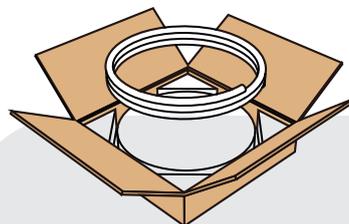1. Stick the line label, stick ErP label and UL label to suit reality;

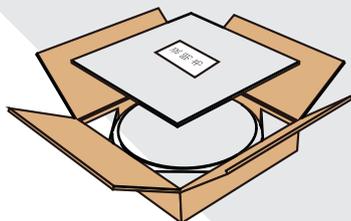2. Cover with PE film and seal with transparent glue;
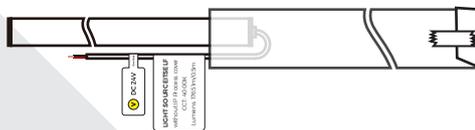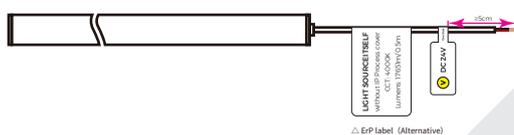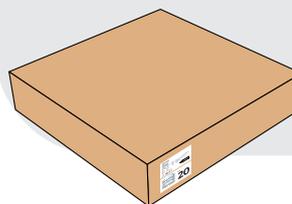
3. Put the pearl cotton into the box;

pearl cotton
pearl cotton
pearl cotton
outer box
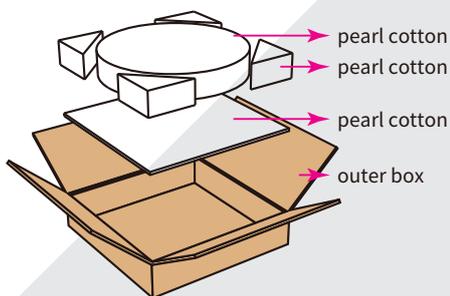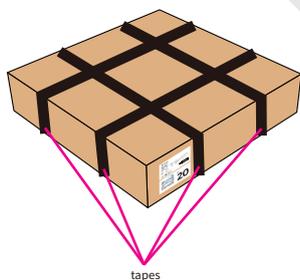
4. Wrap the product in the pearl cotton as required;

5. Put the last pearl cotton on the surface,put instructions into the box sealing the box；

6. The outer box is sealed with sealing glue and the relevant labels are attached.QC inspection, covered with PASS stamp;

7. Play four packing tapes；

tapes

Model	Product size	Product Quantity/ box	Product Quantity/ case	Product net weight (kg)	Net weight per box (kg)	Gross weight (kg)	Carton size (mm)
NNR25P-XXXX24CSN050BC0500-ESD	L5000*φ25mm	5M*1	5M	1.85	3.7	6	560*560*125
NNR25P-XXXX48CSN050BC0500-ESD	L5000*φ25mm	5M*1	5M	1.85	3.7	6	560*560*125

【Reliability test】

test item	Classification	Reference	Test method or condition
Safety test	Mechanical strength	IEC 60598-1； IEC 60598-2-21	The hammer spring Impact energy 0.35J
	IP	IEC 60598-1； IEC 60598-2-21	IP65
	Winding Test	IEC 60598-1； IEC 60598-2-21	φ150mm cylinder, 60N pull, winding 10 times at（-25℃±2℃），and 10 times after(-15℃±2℃, 16h).
	Cold Bend Test	IEC 60598-1； IEC 60598-2-21	wound on mandrel, low-temperature (-15℃±2℃, 16h), around the mandrel for two turns
	Cold Impact test	IEC 60598-1； IEC 60598-2-21	Low-temperature（-15℃±5℃, 16h), hammer falls from a height of 100mm.
	Insulation Resistance	IEC 60598-1； IEC 60598-2-21	≦ 2MΩ
	Electrical strength	IEC 60598-1； IEC 60598-2-21	500V
Mechanical reliability testing	Bending test	Colors	Each 300mm，bending up and down 30 times
	Bending test	Colors	Each 300mm, bending left and right 30 times
	Torsion test	Colors	Twist clockwise 5 times and then release, repeat 30 times
	Disassembly and assembly test	Colors	/
Environment Reliability testing	High temperature storing test	IEC 60068-2-2	80℃, 168h
	Low temperature storing test	IEC 60068-2-1	'-40℃, 168h
	High temperature and Humidity impact	IEC 60068-2-78	60℃, 85%RH
	Salt Spray test	IEC 60068-2-11	5% salt solution concentration, 24h
	IK	IEC 62262	5 times of impact on each exposed surface
	Lifetime aging test	Colors	35℃, 6000h
	switch test	Colors	10s On, 10s Off，10000 times

【Precautions】

·Please use an isolated power supply to drive the LED light bar, and the ripple of the constant voltage source is less than 5%. Do not use resistance-capacitance step-down, non-isolated power supplies to drive the LED light bar.

·In actual applications, the power supply should reserve 20% of the margin (it is recommended to use only 80% of the power) to ensure sufficient voltage to drive the product.

· Please operate carefully, do not touch the AC power terminal when the power is on to prevent electric shock.

·Pay attention to the positive and negative poles of the power cord, and do not connect it wrongly. Whether the voltage of the power supply and the product are the same, so as to avoid damage to the product.

·During the installation process, please avoid scratching, twisting and irregular bending of the product, otherwise it may cause irreparable damage to the product.

· In order to ensure the life and reliability of the light strip, please do not bend it in an arc with a radius of 150mm or less. A too small bending radius will damage the product itself.

·If the actual application length exceeds the specified use length, it will cause the lamp belt to overload and heat, and the brightness is uneven.

·In order to prevent your eyes from being hurt, try to avoid staring at the light-emitting surface of the light bar for a long time.

· Non-professionals are prohibited from installing, disassembling and repairing the product.

· It is strictly forbidden to use any acidic or alkaline adhesives to fix products (including but not limited to glass glue, etc.).

· Different IP grades are used in different scenarios, and IP65 is not suitable for immersed environments.

· Products of different sizes and specifications under the same color temperature value due to structural differences, the final color of the product is slightly deviated, and it needs to be confirmed before use.

· When hanging vertically, deformation will occur with time and gravity. During installation, please add auxiliary shaping accessories.

·The bending process requires gentle operation.

· During the bending process, the light source will shift slightly, and there are some dark areas on the head and tail, which is a normal phenomenon.

· Due to the characteristics of plasticity, the product may have uneven light output. During the modeling application process, it can be improved by adjusting the bending arc and tapping the product.

· Due to the characteristics of the silicone material, it is normal for the color of the colloid to change slightly after the neon product is used for a long time.

· It is strictly forbidden to use 502/705 and other adhesives that are prone to chemical reactions with silica gel during construction and installation. It is recommended to use silicone sealant for bonding.
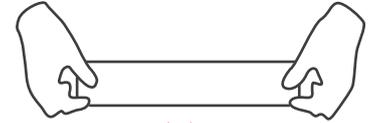
· Long-term storage and the remaining products after cutting and use must be sealed to avoid exposure to organic environments such as aldehydes/benzenes.

· When the product is installed and used, it is recommended that the product as a whole be in the same environmental conditions to avoid inconsistent color changes of the product colloid due to differences in product exposure and environmental conditions.
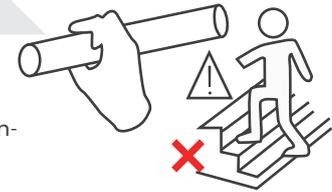
.When using dimmer and dimming power supplies like Triac, etc, conduct compatibility tests on the product, dimmers and power supplies to ensure full compatibility. If any issues arise, contact COLORS for technical support.

It is forbidden to wrap objects less than 150mm

NO stretching

No trampling