STA CK ABL

Configuration
Guide

Introducing **Stackabl,** a tech solution that converts textile and manufacturing waste into bespoke, acoustic lighting.

America stands at a critical juncture. With a staggering 17 million tons of textile waste produced annually, the nation ranks as the second largest textile waste producer worldwide. Alarmingly, only 1% of these textiles are recycled, making textiles the 5th most common landfill occupant despite their high potential for reuse and recycling. The tide is turning, however, as legislation both in the U.S. and the EU tightens its grip on producers of textile products. A prime example is California's Extended Producer Responsibility Act, which mandates brands to shoulder a collective $500 million to divert textile from waste streams.

In these challenging times, the question arises: How can we innovate to not just manage, but strategi-cally sequester waste, integrating it seamlessly into fresh product designs? The answer is Stackabl.

At Stackabl, we harness the power of cutting-edge, patent-pending design, processing, and production technologies. Our strategy is two-fold:
- We design, with precision, products centered around bulk textile waste streams, ensuring minimal post-processing.
- Through strategic partnerships with top-tier U.S. manufacturers, we secure premium industrial waste to create personalized acoustic lighting crafted efficiently from assembled waste materials.

Join us in redefining the waste narrative. Stackabl doesn't just recycle – we turn waste into wonders.

Canopy / multi-fixture canopy

Hanging cable

5" aluminum plate
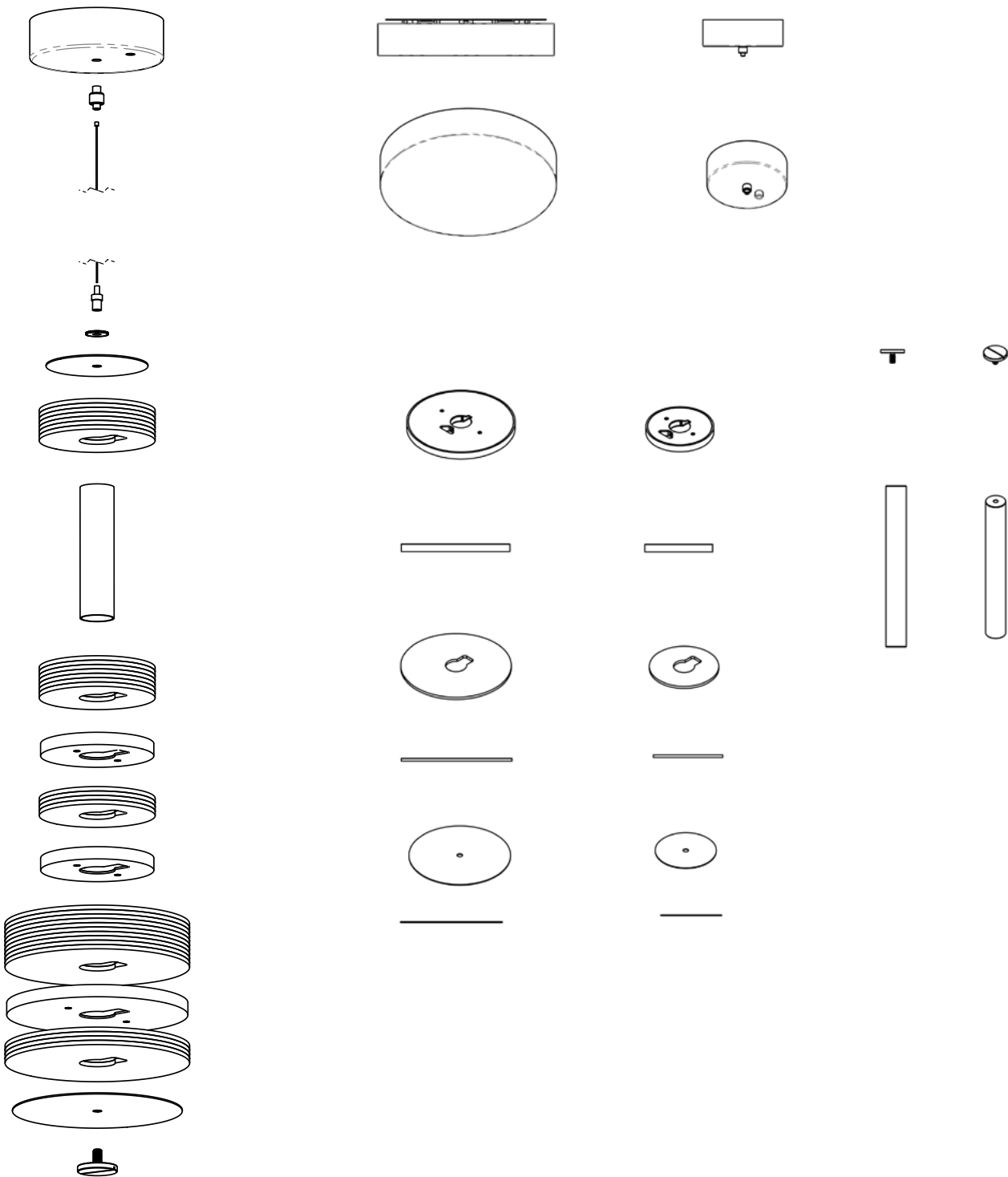
5" merino felt off-cuts

Aluminum tube

5" light disc

8" merino felt off-cuts

8" light disc

8" aluminum plate

Aluminum tuft

Specifications

LIGHT DISC TEMP
2200 K or 3000 K

APPLICATION
Dry indoor use only

MATERIALS
- 100% upcycled felted merino wool
- Cast acrylic
- Post-consumer aluminum
- 60% recycled PET acoustic board

POWER
Power supply: TRIAC/ELV dimming, 0-10v, DALI
Input voltage: 110-227 Vac
Lamping: 12W, 24VDC LED (PER UNIT), CRI 90, 50,000 hours
Lumen output at source per light disc: 585

CERTIFICATION
ETL certified

100% Upcycled Felted Merino Wool

PRODUCT NAME
5mm Wool Design Felt

ENVIRONMENTAL
100% biodegradable/compostable, contains no formaldehyde,
100% VOC free, no chemical irritants, and free of harmful substances
Contributes to LEED©
Living Building Challenge Criteria Compliant
Oeko-Tex Standard 100 Certified Product Class II
Meets VOC test limits for the CDPH v1.2 method

ACOUSTICS
ASTM C 423: NRC – 0.20, SAA – 0.20

COLORFASTNESS
Colorfastness to Light Class 4–5 (40 hours)
Colorfastness to Crocking Class 3–4 (wet), Class 4–5 (dry)

FLAMMABILITY
AS/NZS 3837-1998: Group 3
ASTM E 84: Class A (unadhered + flame treated), Class B (unadhered + untreated)
CAN/ULC S102-10: FS Rating 25, SD Classification 80 (flame treated)
EN 13501-1 (Euroclass): D-s2-d0 (flame treated)
FAR 25.853(a): Pass (60 second vertical burn), Pass (12 second vertical burn)
ISO 5660.1-2002: Group 3
NFPA 701: Pass (flame treated)

DURABILITY & STRENGTH
ASTM D 5034 (Grab Test): 350 lb (avg of warp), 344 lb (avg of weft)

60% Recycled PET Acoustic Board

PRODUCT NAME
PET Needle Punched Stiff Sheets

HAZARD IDENTIFICATION
Hazard Designation: N/A

COMPOSITION/INFORMATION ON INGREDIENTS
Description:
- PET 99.00% CAS NO.: 25135-73-3
- TiO_2 0.1% CAS NO.:
- $C_4H_{10}O_3$ 0.3% CAS NO.:
- Ash Content 0.05% CAS NO.:
- Fe 0.55% CAS NO.:

FIREFIGHTING MEASURES
Flash Point: > 370 DegC (Estimated)
Flammable Limits: N/A
Autoignition Temperature: > 440 DegC (Estimated)

STABILITY AND REACTIVITY
Stability: Stable
Incompatibility: None known
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Temperatures above 160°C

8

6"   12"   18"   24"   30"   36"   42"   48"

5

6"   12"   18"   24"   30"   36"   42"   48"

585

12"   16 1/2"   22"

858

12 1/8"   22 1/2"   36 3/8"

58

8 5/8"   17 1/8"   25 3/4"

Vertical
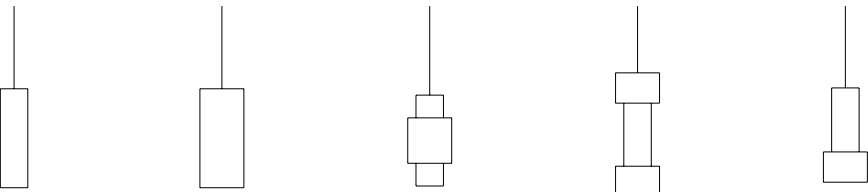
Horizontal
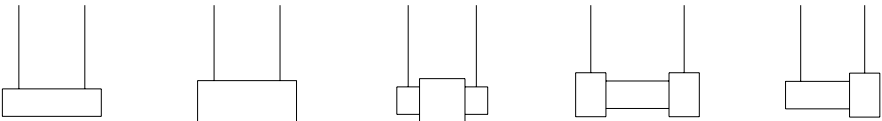
Hanging Cables
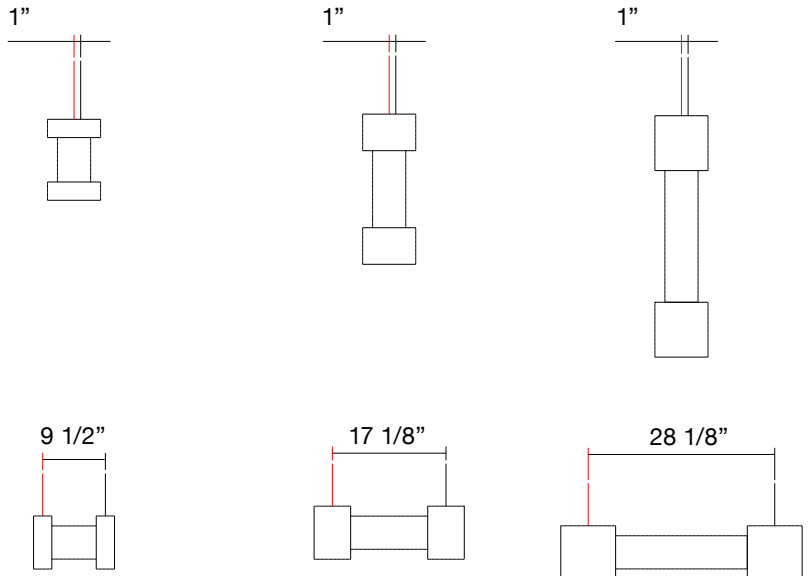
1/6 from the end of overall length for 5 and 8 fixtures
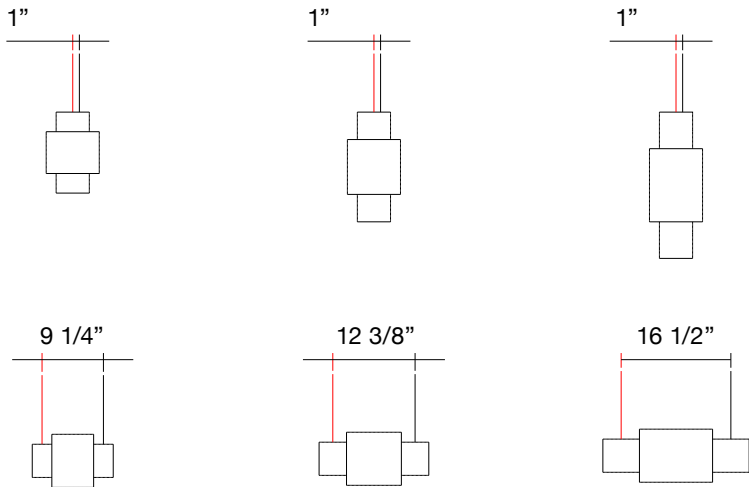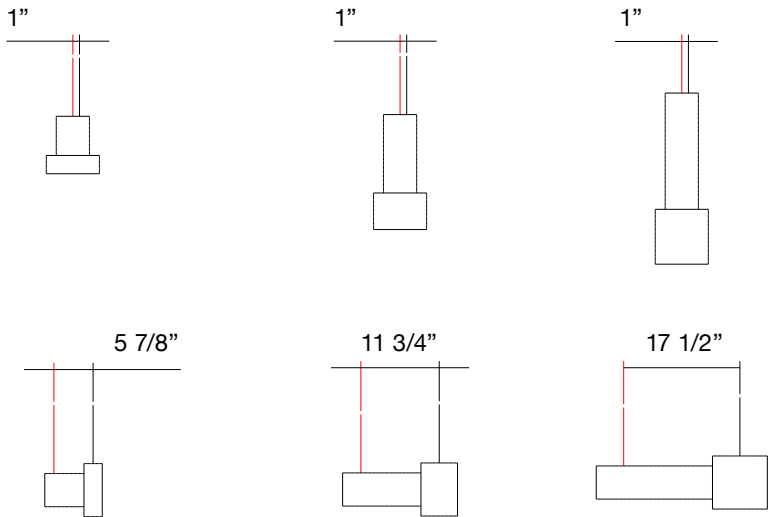
1/2 from end sections for 585, 858, 58

5 & 8

1"   1"

4"   4"

585

1"   1"   1"

9 1/4"   12 3/8"   16 1/2"

858

1"   1"   1"

9 1/2"   17 1/8"   28 1/8"

58

1"   1"   1"

5 7/8"   11 3/4"   17 1/2"
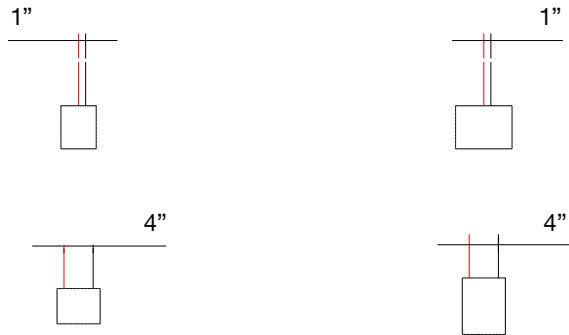
Power Cables

Top exit for vertical fixtures 1" off center

Side exit for vertical fixtures must be 3 layers away from light disc (no go zone *shown in section 6*)

Top exit for horizontal fixtures, in line with left hanging cable

Side exit for horizontal fixtures, through end plate
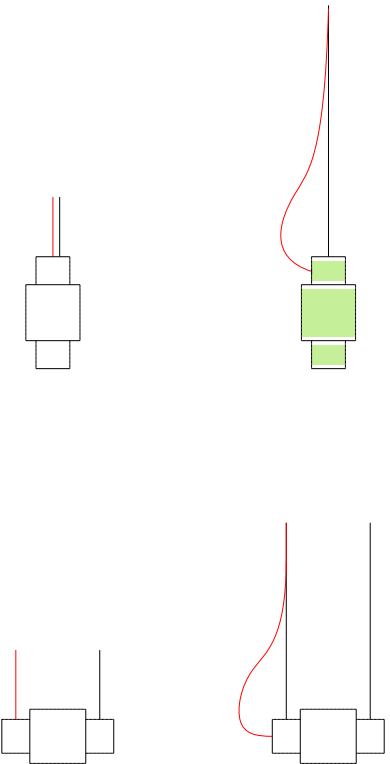
Light Discs

Light discs must have 3 textile layers between them

Max 5" light discs per fixture: 10

Max 8" light discs per fixture: 6

Max 5" and 8" light discs per fixture: 6

6", 12", and 18" lengths have lower max light disc quantities due to size constraints

≡ *No light discs zone*

5 & 8

6" — Max 4 light discs

12" — Max 9 light discs

18" — Max 10 light discs
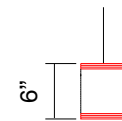
24-28" — Max 10 light discs
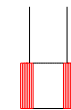
Max 3 light discs
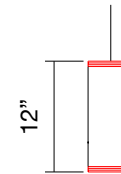
Max 9 light discs
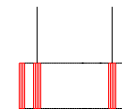
Max 9 light discs
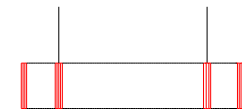
Max 10 light discs

585

858

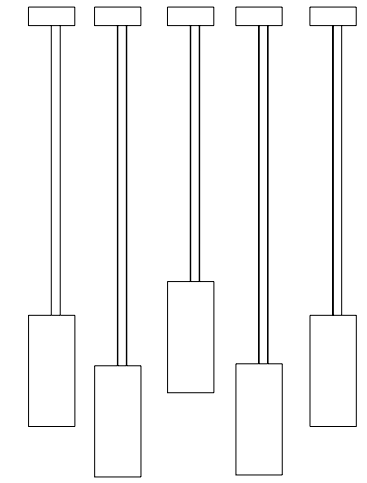
58
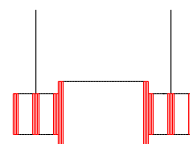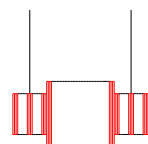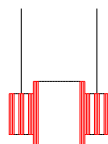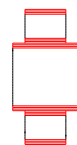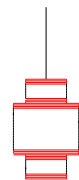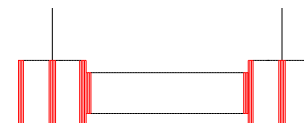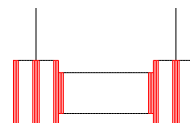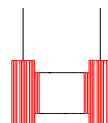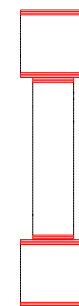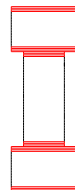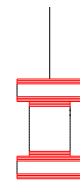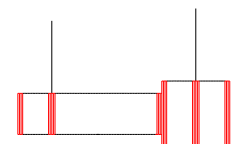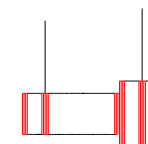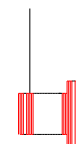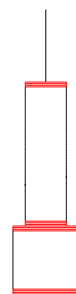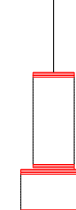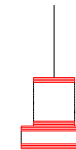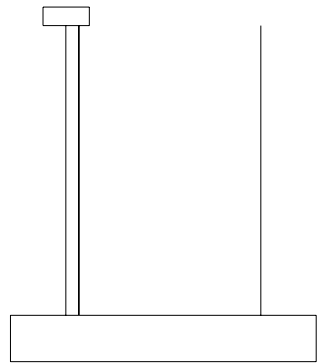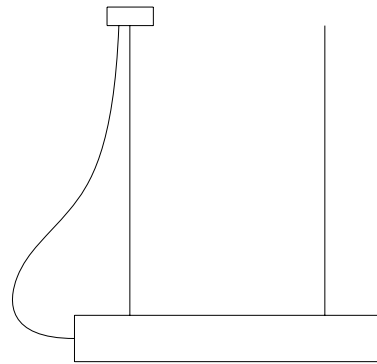
UNIT
LIST $2,200
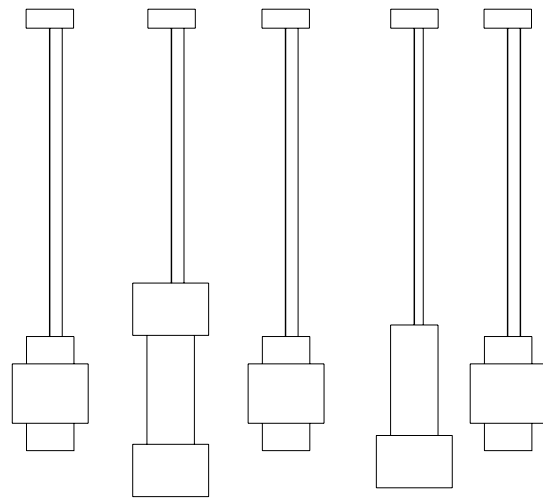
UNIT
LIST $2,200
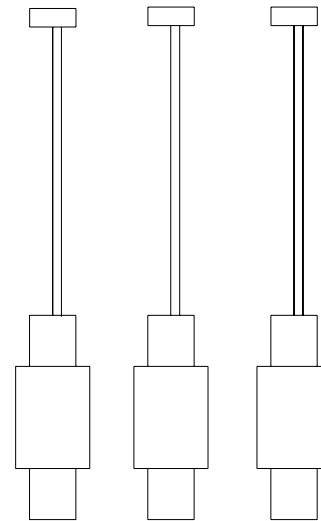
CLUSTER
LIST $7,500
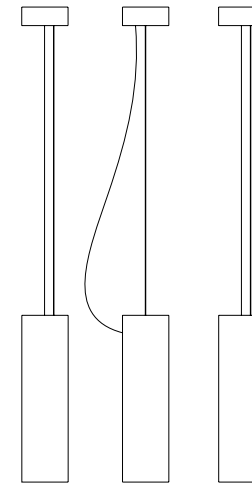
CLUSTER
LIST $5,700

CLUSTER
LIST $8,500

All clusters priced with one light disc per fixture up to the maximum number of discs outlined in section 6.
All prices in USD. Add $75 for a 5" light disc. Add $100 for a 8" light disc

CLUSTER
LIST $11,000

UNIT
LIST $4,200
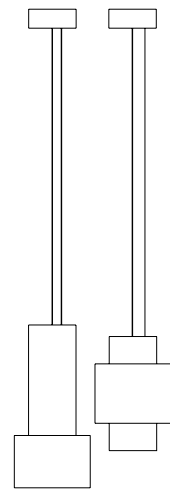
CLUSTER
LIST $4,200

CLUSTER
LIST $12,400

All clusters priced with one light disc per fixture up to the maximum number of discs outlined in section 6.
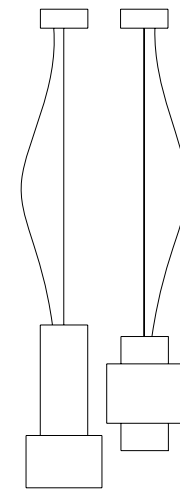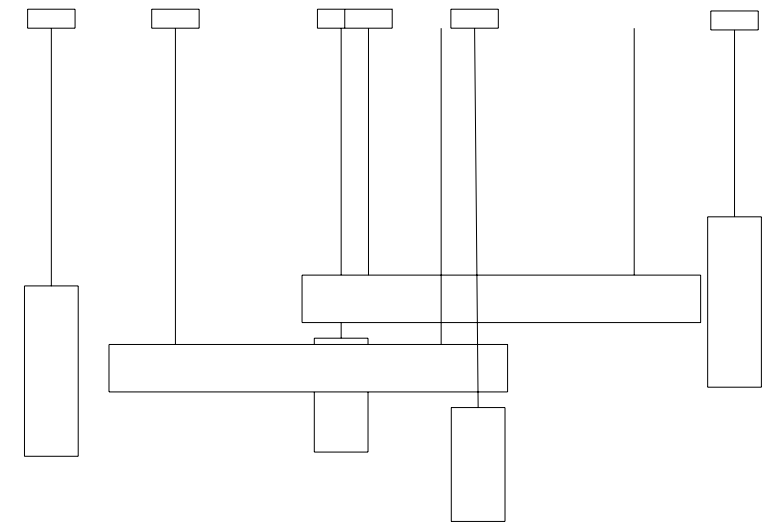*All prices in USD. Add $75 for a 5" light disc. Add $100 for a 8" light disc*

CLUSTER
LIST $5,300

CLUSTER
LIST $5,300

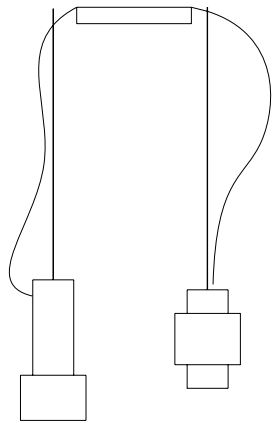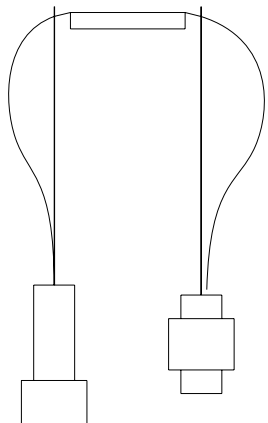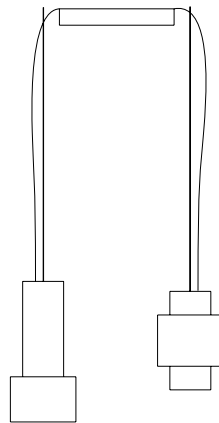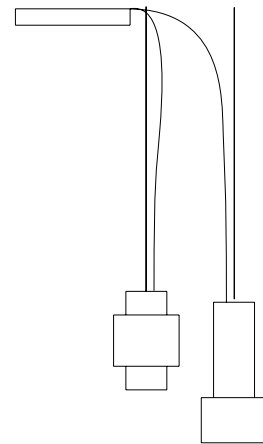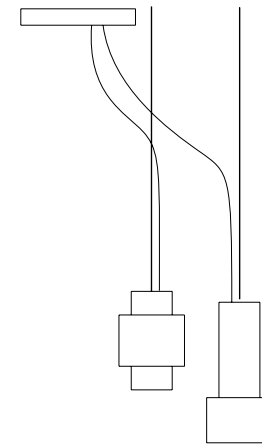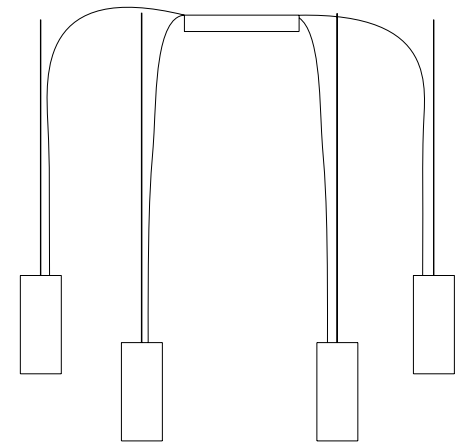**CLUSTER**
LIST $5,300

CLUSTER
LIST $5,300

CLUSTER
LIST $5,300

CLUSTER
LIST $7,000

All clusters priced with one light disc per fixture up to the maximum number of discs outlined in section 6.
Multi-fixture canopies can support up to 24 light discs each.
All prices in USD. Add $75 for a 5" light disc. Add $100 for a 8" light disc

CLUSTER
LIST $7,000

CLUSTER
LIST $13,600

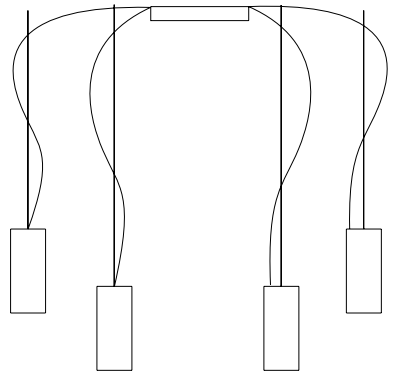**CLUSTER**
LIST $11,100

CLUSTER
LIST $17,100
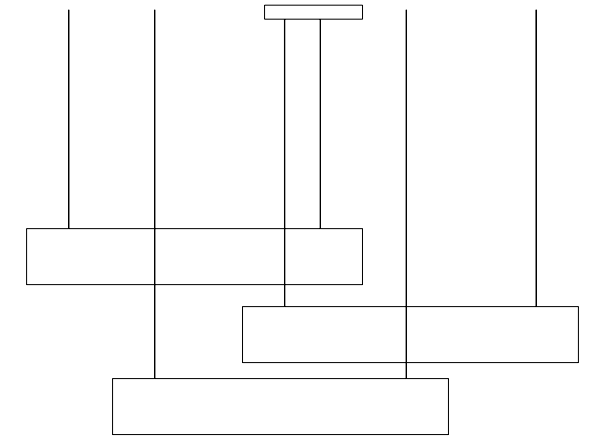
CLUSTER
LIST $13,200

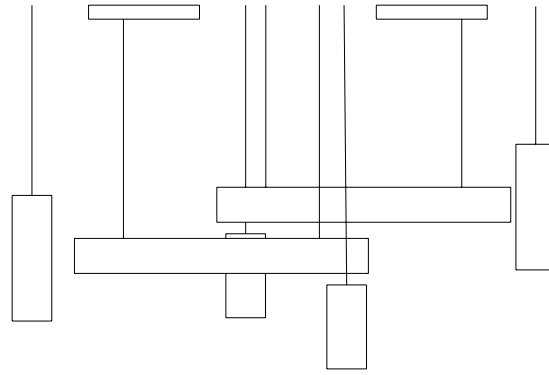*All clusters priced with one light disc per fixture up to the maximum number of discs outlined in section 6.*
Multi-fixture canopies can support up to 24 light discs each.
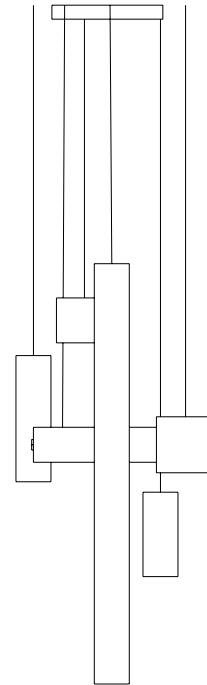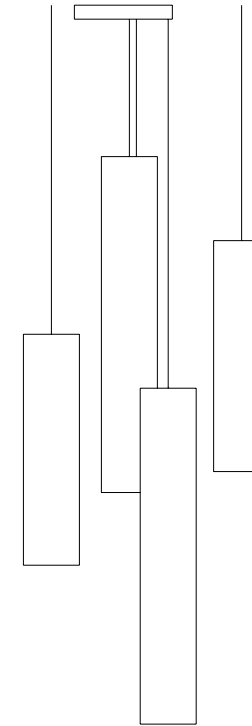*All prices in USD. Add $75 for a 5" light disc. Add $100 for a 8" light disc*

CLUSTER
LIST $16,600

UNIT
LIST $3,600

All prices in USD. Add $75 for a 5" light disc. Add $100 for a 8" light disc up to the maximum number of discs outlined in section 6.

CLUSTER
LIST $7,100

CLUSTER
LIST $13,500

All prices in USD. Add $75 for a 5" light disc. Add $100 for a 8" light disc up to the maximum number of discs outlined in section 6. Multi-fixture canopies can support up to 24 light discs each.

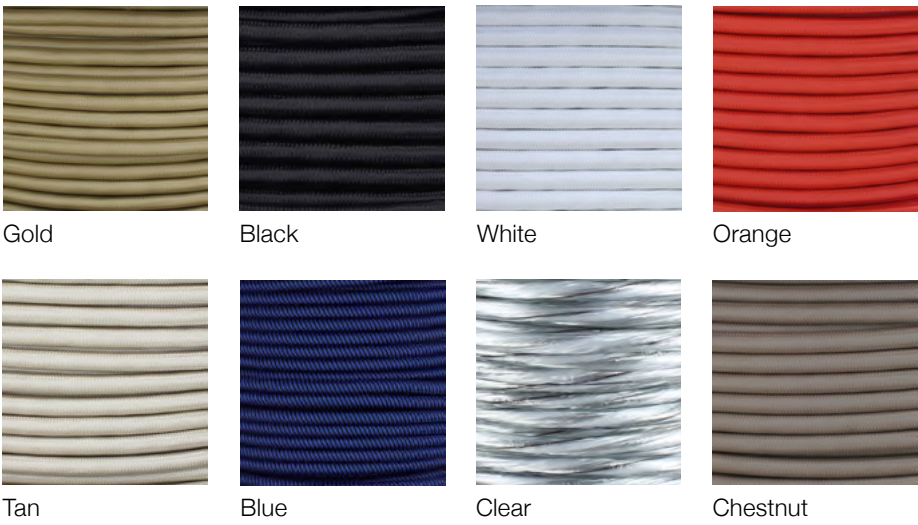**Natural Felted Merino Wool - Premium Remnant (Base) Colors** (5mm)

Senf	Kiwi	Rost	Petrol	Ozean
WollweiB	WeiB	Gletscher	Asche	Graphit

60% Recycled Polyethylene Terephthalate (Pet) Colors (9mm)

Sand Dollar	Oat	Periwinkle	Lilac	Midnight Blue
Orange	Salmon	Pink	Red	Maroon
Heather Green	Pear	Stone	Lemon	Yellow

Cable Color Options

Gold	Black	White	Orange
Tan	Blue	Clear	Chestnut

Metal Components Material Options

Black	Champagne	Clear

Canopy Color Options

White	Black
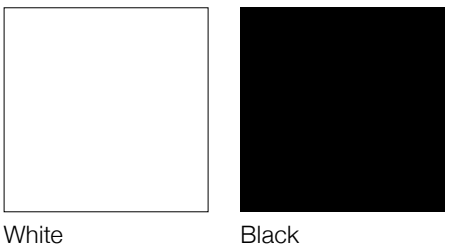
Please note that colors may vary between production runs

STA
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ABL