



Medical Products Catalog



Quality and Innovation

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ABOUT CCT

CCTapes is a fast growing, specialty tape manufacturer with a proven track record of success in providing unique solutions to customer and market needs with unparalleled speed and industry leading quality.

CCTapes produces a broad portfolio of adhesive tape products, using both acrylic and synthetic rubber adhesives and a wide range of foams, films, and other substrates.

With a proven track record of success, we are a reliable and secure partner for today and the future. We offer a level of customization and quality in our product line that is unmatched in the industry.

Customer partnership is at the heart of how we work.



The CCT Advantage

We partner closely with our customers to provide:

- Best in class **quality**
- **Flexibility** in product offering
- Significant **customization**
- **Creativity** and problem solving
- **Speed** of response
- Competitive **economics**

THE CCT ADVANTAGE

Partnering with CCT for your PSA medical tape needs offers more than having just another supplier. Our products are manufactured and tested in a best in class quality system. We offer significant flexibility in our product offering and order sizes, with customization to meet your needs. Our team will bring creative problem solving and product design abilities, along with speed of response to ensure your deadlines are met. Our close partnerships with our material suppliers allows us to offer unique materials that can help to differentiate your products and enable growth.



MEDICAL PRODUCTS

CCT is proud to offer a broad medical tape portfolio designed for a wide range of applications. Our constructions include medical grade foams, polyesters, polyethylenes, nonwovens and polyurethanes as well as other specialty materials, with a range of hypoallergenic acrylic and rubber adhesives.

This brochure details some of our core products. In addition, we provide significant levels of customization, to tailor products to your needs.

CCT provides support to customers with Operational Qualification (OQ), Performance Qualification (PQ), and Production Part Approval Process (PPAP) needs and requirements.

SKIN SAFETY AND STERILIZATION

All of the pressure sensitive adhesives (PSA) that we sell into the medical market have been thoroughly tested by an external lab and are compliant with ISO10993. The adhesives have been shown to be non-sensitizing, non-irritating and non-cytotoxic for direct skin contact applications. Our acrylic adhesives and synthetic rubber adhesives are all latex free. We do not use any natural rubber adhesives.

Our release liners and adhesives are also stable when exposed to gamma (30, 60 and 90 kGy) and ethylene oxide (EtO) sterilization processes.



CCT CAPABILITIES



Coating

CCT's coating equipment uses slot die coating heads, capable of highly precise coat weight control and we can coat hot melt adhesive products as well as solvent based adhesives and coatings.

Hot melts can be coated from 0.7 to 10 mils (12.5 to 250 microns)

Solvent based systems can be coated from 0.5 to 5 mils dry (12.5 to 125 microns)

We have modern process controls for all critical aspects of our process - coat weight, lines speed, oven temperatures, air flow and more. Corona treating to meet application design needs.

Converting

Our slitting capability provides everything from edge trimming down to 0.25" slit widths. We offer a variety of slitting techniques and machines, designed to handle a wide range of substrates and facestocks. Our roll lengths can be tailored to your needs, from 750 up to 5,000 lineal feet.

Product Testing and Quality Control

Our ISO17025 accredited adhesives testing laboratory provides a broad range of tests to verify quality. We are also able to implement your own test methods. In addition, we are able to track batch history and provide all of the record keeping and data systems you would expect.

Quality and Safety

CCT is an ISO 9001:2008 certified manufacturer and our adhesives testing laboratory is certified to ISO 17025:2005. We pride ourselves in our high quality manufacturing systems and our goal is to supply custom coated products that meet or exceed all expectations.

We meet or exceed all regulations for emissions and waste production. We have state of the art environmental controls in our processes and continually monitor the safety of our operations.

CCT is a Responsible Tape Manufacturer (RTM) and member of the Pressure Sensitive Tape Council. RTM is a new initiative that aims to be an indicator of ethical and quality leadership in the tape industry.

CCT has made a commitment to ensure that our tape products are produced in a responsible manner, and with consideration for the environment, workers, facilities and quality systems.



RELEASE LINER INFORMATION

CCT release liners are available in a wide range of paper, poly coated paper, polyester film and HDPE film substrates. These high quality release liners are offered with silicone release coatings on either one or both sides of the substrate. Our stock release liners are available in small minimum order quantities in full web width as well as slit to width with short lead times.

DK (Densified Kraft) Liners

Provides very tight caliper control, ultra smooth finish, good tensile strength with high temperature resistance. Excellent for rotary die cutting. Can be silicone release coated on one or two sides.

42#	Caliper 2.3 mils - Color White
50#	Caliper 2.9 mils - Color White
54#	Caliper 3.1 mils - Color White
60#	Caliper 3.5 mils - Color White
80#	Caliper 4.5 mils - Color White

PCK (Poly Coated Kraft) Liners

Feature excellent moisture stability and low curl properties. They can be polyethylene coated one or two sides, or silicone release coated on one or two sides

61#	Caliper 4.6 mils - Color White
76#	Caliper 5.6 mils - Color White
84#	Caliper 6.2 mils - Color Natural
96#	Caliper 6.8 mils - Color White
12pt	Caliper 13.0 mils - Color Natural

PET (Polyester) Film Liners

Properties include: ultra smooth surface, excellent caliper control, high temperature resistance, chemical resistance, tensile and tear properties, superior moisture resistance and dimensional stability. Can be silicone release coated on one or two sides.

20PET	Caliper 2.0 mils - Color Clear
30PET	Caliper 3.0 mils - Color Clear

PE (Polyethylene) Film Liners

Ultra conformable, excellent tear strength, excellent chemical resistance, superior moisture resistance and smooth surface. PE film liners can be silicone release coated on one or two sides.

B4PE	Caliper 4.0 mils - Color Light Blue
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FOAM TAPES



MDFT1332-61-60

MDFT1332 is a white, double coated 1/32" PE foam tape with differential adhesives. A conformable and flexible foam tape that provides excellent adhesion and removes cleanly from skin without causing irritation. End use applications include: monitoring electrodes, fabric/substrate design and medical device assembly. The liner side adhesive provides quick stick/bond for medical device assembly.

Product	Adhesive (Air side / Liner side)	Foam Carrier	Liner	Width
MDFT1332	1.6 mil acrylic / 2.0 mil rubber	1/32" white EVA foam	PCK 61#	60"

MDFT2532-61-60

A conformable, white 1/32" PE foam pressure sensitive tape with differential adhesives. Designed for a variety medical industry end uses that include: monitoring electrodes, direct skin bonding, fabric/substrate design and medical device application. Excellent adhesion to a variety of substrates. Rubber adhesive on the liner side provides quick stick/bond for device assembly. Adhesives exhibit good shear properties.

Product	Adhesive (Air side / Liner side)	Foam Carrier	Liner	Width
MDFT2532	1.6 mil acrylic / 2.0 mil rubber	1/32" white EVA foam	PCK 61#	60"

MDFT3500-96

A single coated, white PE foam tape. Constructed with a specially formulated, high performance medical grade acrylic adhesive system. The foam is corona treated on both sides to enhance anchorage of PSA and future printing or bonding. Designed for a variety of medical industry end uses that include: direct skin bonding, EKG and defibrillator pads, fabric/substrate design and medical device application.

Product	Adhesive	Foam Carrier	Liner	Width
MDFT3500	2.0 mil acrylic	1/32" white EVA foam	PCK 96#	60"

MDFT3502-96

A single coated, white PE foam tape. Constructed with a specially formulated, high performance medical grade acrylic adhesive system. The foam is corona treated on both sides to enhance anchorage of PSA and future printing or bonding. Designed for a variety of medical industry end uses that include: direct skin bonding, EKG and defibrillator pads, fabric/substrate design and medical device application.

Product	Adhesive	Foam Carrier	Liner	Width
MDFT3502	2.0 mil acrylic	1/16" white EVA foam	PCK 96#	60"

FOAM TAPES



MDFT3514-96-60

A single coated, conformable, white foam tape. Constructed with a specially formulated, high performance medical grade acrylic adhesive system with good LSE bonding. Foam is corona treated on the adhesive side only. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric / substrate design and medical device application.

Product	Adhesive (Air side / Liner side)	Foam Carrier	Liner	Width
MDFT3514	2.0 mil acrylic	1/16" white EVA foam	PCK 96#	60"

MDFT3600-76

A double coated, conformable white foam tape. Constructed with a specially formulated, high performance medical grade acrylic adhesive system, designed to adhere well to delicate skin making it ideal for pediatric and neonatal applications. Suitable for a variety of medical industry end uses that include: medical foam tape assembly, direct skin bonding, fabric/substrate design and medical device application. The foam carrier is designed for excellent conformability, and supported by a white poly-coated liner for product stability and die cutting.

Product	Adhesive (Air side / Liner side)	Foam Carrier	Liner	Width
MDFT3600	1.8 mil acrylic / 1.8 mil acrylic	1/32" white EVA foam	PCK 76#	60"

MDFT4500-84-60

MDFT4500 is a soft, white single coated foam tape. It is coated with a gentle, low tack, medical grade adhesive system. Designed for a variety of direct skin contact applications where flexibility, comfort and gentle removal is desired. The conformable, low profile foam carrier is supported by a natural poly-coated Kraft liner for product stability and enhanced die cutting capability.

Product	Adhesive	Foam Carrier	Liner	Width
MDFT4500	1.3 mil acrylic	1/32" white EVA foam	PCK 84#	60"

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FOAM TAPES



MDFT4502-96-60

A single coated white PE foam tape. Constructed with a specially formulated, high performance medical grade acrylic adhesive system with good LSE bonding. Foam is treated on the adhesive side only. Designed for a variety of direct skin contact applications where flexibility, comfort and gentle removal is desired. Medical industry end use includes: direct skin bonding, fabric/substrate design and medical device application. The foam carrier is designed for excellent conformability, and supported by a poly-coated liner for product stability and die cutting.

Product	Adhesive	Foam Carrier	Liner	Width
MDFT4502	1.3 mil acrylic	1/16" white EVA foam	PCK 96#	60"

MDFT4516 Series

A white PE foam coated with a high tack acrylic medical grade adhesive system that provides secure comfortable contact to skin. Designed for a variety medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application including base pad substrate for anesthetic monitoring. Provides excellent adhesion to a variety of substrates.

Product	Adhesive (Air side / Liner side)	Foam Carrier	Liner	Width
MDFT4516-76-60	2.3 mil acrylic / 2.3 mil acrylic	1/16" white EVA foam	PCK 76#	60"
MDFT4516-84-60	2.3 mil acrylic / 2.3 mil acrylic	1/16" white EVA foam	PCK 84#	60"

MDFT4532 Series

A double coated, white PE foam coated on both sides with a high tack, acrylic medical grade adhesive system. Designed for a variety medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application. Excellent adhesion to a variety of substrates.

Product	Adhesive (Air side / Liner side)	Foam Carrier	Liner	Width
MDFT4532-76-60	2.3 mil acrylic / 2.3 mil acrylic	1/32" white EVA foam	PCK 76#	60"
MDFT4532-84-60	2.3 mil acrylic / 2.3 mil acrylic	1/32" white EVA foam	PCK 84#	60"

DOUBLE COATED TAPES



MD1309

A double coated tape designed with a rubber based adhesive on both the the air and liner side of the construction. Engineered for quick extensible bond to many low surface energy films including PP (polypropylene) and PE (polyethylene). Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application.

Product	Adhesive (Air side / Liner side)	Carrier	Liner(s)	Width
MD1309	1.3 mil rubber / 1.8 mil rubber	0.5 mil PET	DK 60#	54"

MD2010-76-60

Constructed with a specially designed, medical grade rubber based permanent adhesive on both the liner and air side. Suitable for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application.

Product	Adhesive (Air side / Liner side)	Carrier	Liner(s)	Width
MD2010-76-60	1.6 mil rubber / 1.4 mil rubber	0.5 mil PET	PCK 76#	60"
MD2010B-76-60	2.5 mil rubber / 2.5 mil rubber	0.5 mil PET	PCK 76#	60"

MD2038-60-60

A double coated medical grade tape constructed with a rubber based, permanent adhesive system on both the liner and air side. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application. Excellent adhesion to a variety of substrates, including low surface energy plastics. Quick bond to difficult to stick to design materials like breathable viral barrier (BVB) nonwoven drapes for medical suit assembly. Polyester carrier offers additional dimensional support and enhanced die cut ability.

Product	Adhesive (Air side / Liner side)	Carrier	Liner(s)	Width
MD2038-60-60	1.2 mil rubber / 1.6 mil rubber	0.5 PET	DK 60#	60"

MD4001-76

A double coated tape with permanent adhesives on both the liner and air side. Constructed with a medical grade rubber based adhesive on the air side and a medical grade acrylic adhesive on the liner side. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application. Excellent adhesion to a variety of substrates including spunbond-meltblown-spunbond (SMS) nonwovens.

Product	Adhesive (Air side / Liner side)	Carrier	Liner(s)	Width
MD4001-76-60	1.6 mil rubber / 2.0 mil acrylic	0.5 PET	PCK 76#	60"

DOUBLE COATED TAPES



MD5001-76-54

A medical grade tape double coated tape constructed with a high tack, aggressive acrylic adhesive system. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application. Used as a carrier in assembly of test tube seals. Excellent adhesion to a variety of substrates.

Product	Adhesive (Air side / Liner side)	Carrier	Liner(s)	Width
MD5001-76-54	1.5 mil acrylic / 1.5 mil acrylic	0.5 mil PET	PCK 76#	54"

MD5033

A double coated, conformable, transparent polyethylene film constructed with a medium tack, skin friendly adhesive on both sides. This flexible tape is designed for medical devices and skin attachment for extended periods. Adheres well to a variety of substrates including foams, films and nonwovens. For converting flexibility in demanding applications, the PE carrier offers dimensional support and enhanced die cut ability.

Product	Adhesive (Air side / Liner side)	Carrier	Liner(s)	Width
MD5033-76-60	1.8 mil acrylic / 1.8 mil acrylic	3.0 mil PE	PCK 76#	60"

MD5328-76

A specialty designed, medical grade adhesive on both liner and air side. Engineered with an accurate and reliable, biocompatible adhesive. Designed for a variety of medical industry end uses that include: fabric/substrate design and medical device application. The polyester carrier offers additional dimensional support and enhanced die-cut ability. Assembly aid/adhesive backing for lateral flow diagnostic test strip

Product	Adhesive (Air side / Liner side)	Carrier	Liner(s)	Width
MD5328-76-60	1.4 mil acrylic / 1.4 mil acrylic	3.0 mil PE	PCK 76#	60"

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SINGLE COATED TAPES



MDSC10WR -54-54

A single coated, pearized white, oriented polypropylene film tape, constructed with a high performance medical grade adhesive formulation. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical applications such as TENS assembly and oximetry. The OPP carrier is suitable for printing.

Product	Adhesive	Facestock	Liner	Width
MDSC10WR	1.1 mil rubber	1.0 mil OPP	DK 54#	54"

MDSC112TT-60-55

A tan tricot fabric laminated to a 1.0 mil white polyolefin film coated with a high tack medical grade adhesive for long term wear. The conformable backing is flexible and breathable for increased patient comfort. Designed for a variety of medical industry end uses that include: direct skin contact, medical device attachment and sensor components.

Product	Adhesive	Facestock	Liner	Width
MDSC112TT-60-55	1.8 mil rubber	Tan Tricot	DK 60#	55"

MDSC11WA-54-54

A single coated, pearized white, oriented polypropylene film tape, constructed with a specially formulated, high performance medical grade acrylic adhesive system. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric / substrate design and medical applications such as ostomy and oximetry. The OPP carrier is suitable for printing.

Product	Adhesive	Facestock	Liner	Width
MDSC11WA	1.4 mil acrylic	1.0 mil OPP	DK 54#	54"

MDSC21WMR-54-54

A single coated, pearized white, metalized one side, oriented polypropylene film tape. Constructed with a high performance medical grade adhesive system. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical applications such as TENS pads and oximetry. The OPP carrier is suitable for printing.

Product	Adhesive	Facestock	Liner	Width
MDSC21WMR	1.1 mil rubber	1.0 mil OPP	DK 54#	54"

SINGLE COATED TAPES



MDSC3318-61-60

A PE film tape, constructed with a specially formulated, high performance medical grade acrylic adhesive system. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/ substrate design and medical device application.

Product	Adhesive	Facestock	Liner	Width
MDSC3318	1.5 mil acrylic	3.0 mil PE	DK 61#	60"

MDSC5314-61-54

A single coated 1.0 mil PET film tape, constructed with a specially formulated, high performance medical grade acrylic adhesive system. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric / substrate design and medical applications such as ostomy and oximetry.

Product	Adhesive	Facestock	Liner	Width
MDSC5314	1.4 mil acrylic	1.0 mil PET	DK 61#	54"

MDSC700-42-63

Single coated tape constructed with a white high strength polyethylene facestock. The adhesive is a quick stick, biocompatible, high tack rubber system designed for premium label applications. The adhesive is specially designed to bond to a variety of substrates through a variety of converting processes. Provides printable film reinforcement for EKG top cover designs. The liner provides good die cut ability and ease of removability to expose adhesive.

Product	Adhesive	Facestock	Liner	Width
MDSC700	1.5 mil rubber	3.0 mil high strength PE	DK 42#	63"

MDSCF1110-50-55

A single coated PET with welded foil layer. The aggressive, biocompatible rubber adhesive system is designed to adhere securely to a variety of substrates with good quick stick. Applications include assembly of grounding pads and other devices. Easily die cut and converted.

Product	Adhesive	Facestock	Liner	Width
MDSCF1110	1.0 mil rubber	0.5 mil PET foil weld	DK 50#	55"

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NONWOVEN TAPES



MD5000-96

MD5000 is a white single coated nonwoven PSA tape that provides excellent conformability and die-cut characteristics. Featuring a high performance medical grade adhesive system designed for direct skin contact applications. Constructed with an aggressive permanent adhesive that exhibits excellent wetout to a variety of substrates. End use applications include: pediatric ECG electrodes, stress electrodes and pads and covers where breathability and conformability are required.

Product	Adhesive	Carrier	Liner(s)	Width
MD5000	1.7 mil acrylic	2.4 oz white spun lace	PCK 96#	60"

MD5200-96

MD5200 is a blue single coated nonwoven PSA tape that provides excellent conformability and die-cut characteristics. Featuring a high performance medical grade adhesive system designed for direct skin contact applications. Constructed with an aggressive permanent adhesive that exhibits excellent wetout to a variety of substrates. End use applications include: surgical drape assembly, medical stress electrodes, pads and covers where breathability and conformability are required.

Product	Adhesive	Carrier	Liner(s)	Width
MD5200	1.7 mil acrylic	2.4 oz blue spun lace	PCK 96#	60"

MD5400-96

MD5400 is a tan single coated nonwoven PSA tape. Featuring a high performance medical grade adhesive system designed for direct skin contact applications. Constructed with an aggressive permanent adhesive that exhibits excellent wetout to a variety of substrates. End use applications include: medical stress electrodes, pads and covers where breathability and conformability are required. Excellent conformability and die-cut characteristics.

Product	Adhesive	Carrier	Liner(s)	Width
MD5400	1.7 mil acrylic	2.4 oz tan spun lace	PCK 96#	60"

MD5260

MD5260 is a 1.3oz spun lace nonwoven heat welded to a 1.0 mil polyurethane film and coated with a medical grade adhesive system. The product is suitable for direct skin bonding and also exhibits good conformability and rapid wet-out to a variety of substrates. The lighter weight non-woven helps to provide greater breathability while the PU layer also adds a water barrier while still maintaining breathability.

Product	Adhesive	Carrier	Liner(s)	Width
MD5260	1.5 mil acrylic	1.3 oz spun lace welded to 1.0 mil PU	DK 60#	60"

FILM TAPES



MDF5003 Series

A matte clear film tape, constructed with a specially formulated, high performance medical grade acrylic adhesive system. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric /substrate design and medical device application.

Product	Adhesive	Carrier	Liner(s)	Width
MDF5003-50-60	1.75 mil acrylic	3.0 mil Matte Clear LDPE	DK 50#	60"

MDF5005 Series

Constructed with a specially formulated, high performance medical grade acrylic adhesive system. Utilized in a variety of medical industry end uses for direct skin bonding, fabric/substrate design and medical device applications including electrodes, incise windows, surgical drapes and assembly.

Product	Adhesive	Carrier	Liner(s)	Width
MDF5005L-50-60	1.2 mil acrylic	5.0 mil Matte Clear PVC	DK 50#	60"
MDF5005-50-60	1.75 mil acrylic	5.0 mil Matte Clear PVC	DK 50#	60"
MDF5005H-50-60	2.2 mil acrylic	5.0 mil Matte Clear PVC	DK 50#	60"

MDF5017-60-60

MDF5017 is constructed with a specially formulated, high performance medical grade acrylic adhesive system on a printable film. Designed for a variety of medical industry end use for fixation devices, skin bonding, fabric/substrate design and medical devices. Applications include incise windows, surgical drapes and assembly.

Product	Adhesive	Carrier	Liner(s)	Width
MDF5017	2.0 mil acrylic	1.7 mil LDPE	DK 60#	60"

MDF5034 Series

A white film tape constructed with a specially formulated, high performance medical grade acrylic adhesive system. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric / substrate design and medical device assembly. Typically available on a 50# white SCK easy release liner.

Product	Adhesive	Carrier	Liner(s)	Width
MDF5034WV-50-60	1.75 mil acrylic	3.4 mil PVC	DK 50#	60"

BREATHABLE, CONFORMABLE FILM TAPES



MDUF9000-20PE-60

MDUF9000 is a flexible, transparent, breathable tape designed for a variety of medical industry end uses that include direct skin bonding, and medical device applications. Engineered for comfort, conformability and where high MVTR and a strong secure bond is desirable. Alternative casting sheets are available.

Product	Adhesive	Carrier	Casting Sheet	Liner(s)	Width
MDUF9000-20PE-60	1.2 mil acrylic	1.0 mil PU	2.0 mil PE	DK 50#	60"

MDUF9001-80-60

Breathable, flexible, film tape designed for a variety of medical industry end uses that include direct skin bonding and medical device applications. Engineered for comfort, conformability and where high MVTR and a strong secure bond is desirable. Alternative casting sheets are available.

Product	Adhesive	Carrier	Casting Sheet	Liner(s)	Width
MDUF9001-80-60	1.2 mil acrylic	1.0 mil PU	PCK 80#	DK 50#	60"

MDUF9003-20PE-60

Breathable tape with a medium tack adhesive. Designed for a variety of medical industry end uses including direct skin bonding and medical device applications. Engineered for flexibility, comfort and conformability for many skin adhesion applications where high MVTR is desirable. Alternative casting sheets are available.

Product	Adhesive	Carrier	Casting Sheet	Liner(s)	Width
MDUF9003-20PE-60	1.2 mil acrylic	1.0 mil PU	2.0 mil PE	DK 50#	60"

MDUF9004-80-60

MDUF9004 is a breathable, flexible tape that is suitable for many skin adhesion applications. A medium tack adhesive system designed for a variety of medical industry end use that include direct skin bonding for protection and securement and medical device applications. Engineered for comfort, conformability and where high MVTR is desirable. Alternative casting sheets are available.

Product	Adhesive	Carrier	Casting Sheet	Liner(s)	Width
MDUF9004-80-60	1.2 mil acrylic	1.0 mil PU	PCK 80#	DK 50#	60"

MDUBUF912-56

A flexible, breathable medical tape with ultra-high MVTR through a unique film and acrylic adhesive combination. Designed for long wear/skin bonding, for covering, protecting and secure attachment. High conformability and flexibility provides enhanced patient comfort during long term wear.

Product	Adhesive	Carrier	Casting Sheet	Liner(s)	Width
MDUBUF912	1.2 mil acrylic	1.0 mil film	2.0 mil PP	DK 50#	56"

TRANSFER TAPES



MDTF9111-MDTF9113

A specially formulated medical grade rubber based adhesive system designed for excellent wet-out to a wide range of substrates, yielding dynamic bond strength to foams, nonwovens, metals, plastics and more. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical device application. Excellent adhesion to a variety of substrates.

Product	Adhesive	Liner(s)	Width
MDTF9111-80-54	1.4 mil rubber	DK 80#	54"
MDTF9112-80-54	2.0 mil rubber	DK 80#	54"
MDTF9113-80-54	3.0 mil rubber	DK 80#	54"

MDTF9311

An unsupported, permanent PSA transfer film constructed with a specially formulated medical grade acrylic adhesive designed to promote excellent wet-out to a variety of substrates especially low surface energy plastics. Designed for a variety of medical industry end uses that include: direct skin bonding, fabric/substrate design and medical applications such as ostomy and oximetry.

Product	Adhesive	Liner(s)	Width
MDTF9311	1.1 mil acrylic	DK 84#	54"

MDTF9571-MDTF9573

Unsupported, permanent transfer films are constructed with a specially formulated medical grade adhesive. Designed to promote excellent wet-out to a variety of substrates for a variety of medical industry assembly and construction applications that require an unsupported construction for conformability. Used as an assembly aid tape where multiple component bonding is desired. For direct skin bonding, fabric/substrate design and medical device applications.

Product	Adhesive	Liner(s)	Width
MDTF9571-76-54	1.5 mil acrylic	PCK 76#	54"
MDTF9572-76-54	2.0 mil acrylic	PCK 76#	54"
MDTF9573-76-54	3.0 mil acrylic	PCK 76#	54"

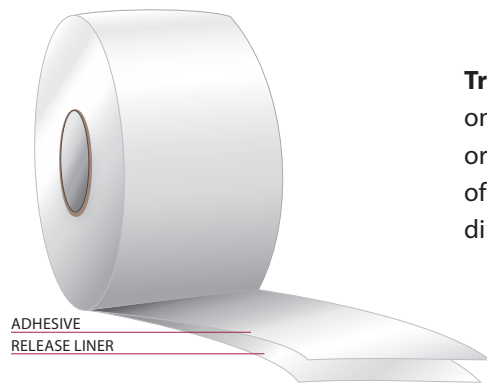
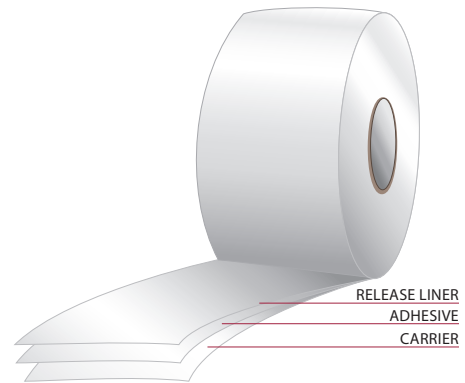
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PSA TAPE CONSTRUCTIONS



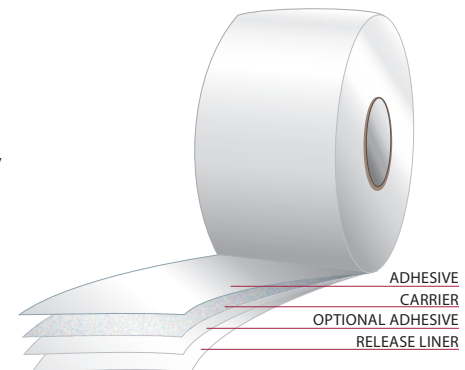
Double coated tapes have an adhesive coated on both sides of a central carrier, often a thin (0.5 mil) polyester, but many films, papers, foams and more can be used. These products also use release liner, which is normally also double sided and uses a differential release to enable easy unwind and application. The adhesive on each side of the carrier can be the same, or different. Similarly, the two adhesives can be the same or different thicknesses.

Single coated tapes have an adhesive applied to one side of a backing material. The backing could be a film, paper, non-woven, foil, foam or many other materials. If the opposite side of the backing has a release coating, then the tape can be “self-wound” without the need for a release liner. If not, then a release liner is also commonly used.



Transfer tapes or unsupported tapes have a coating of adhesive on one side of a double sided release liner. There is no additional backing or supporting material. These tapes can be converted into other types of tape product by lamination to another material, or can be used directly to bond two materials together.

Foam tapes are single or double coated products, with a release liner, that use a layer of foam as either the backing or carrier. Most commonly this can be a polyethylene or polyurethane foam, although other types exist. The foams can come in many densities and thicknesses which all impart very specific properties to the tapes.



PSA TEST METHODS

Data sheets for PSA tapes contain a range of physical property measurements and understanding what these tests mean is important in being able to determine if a particular tape product is right for your application. The most common performance measures are peel, tack and shear. While there are many variants on how these tests are performed, the most common methods are described below.

Peel

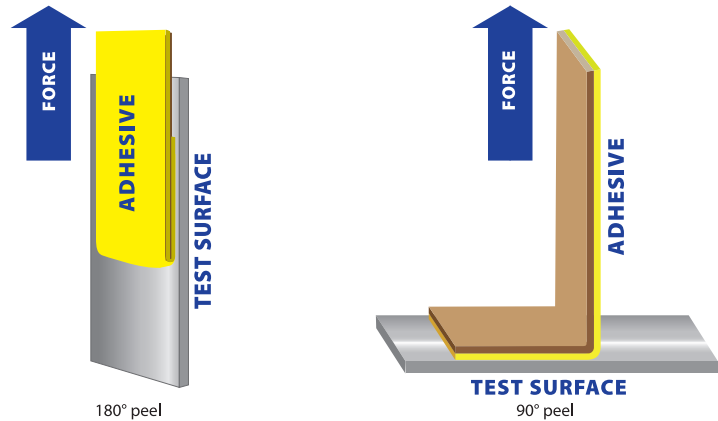
Peel is a measure of adhesion – how well the tape sticks to a specific surface. It is measured by bonding a tape strip to a surface and then recording the force required to pull it off in a controlled manner.

For QC testing purposes, the most common test surface is stainless steel, although other materials are also used and may be seen on data sheets and application specific tests (such as glass, HDPE, PP, ABS and more). The

tape is applied to the surface with a defined amount of pressure and then allowed to remain on the surface for a controlled amount of time (often 20 minutes but tests using 24 hours, or more are also performed).

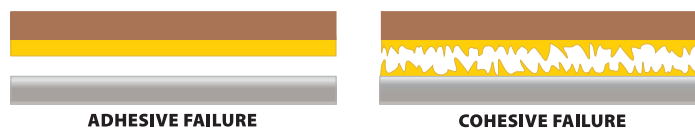
After that time, the tape is peeled off using a machine capable of measuring the force needed. A controlled speed is used (typically 12 inch/minute) as is a controlled angle (with 180° being the most common, although 90° may be used for some very thick tapes). The peel force is reported in units of force per width, such as ozf/in or N/25mm.

Controlling the speed and dwell time are key to getting consistent results due to the viscoelastic behavior of PSAs.



Peel Test

When the test strip is peeled away from the surface it can behave in one of several ways. The tape can remove cleanly from the surface, which is defined as adhesive failure. Alternatively, the tape can remove leaving some of the adhesive behind on the surface and some still on the tape backing, which is called cohesive failure. Combinations of the two are also possible, though less common.



Release

Release testing measures the force required to remove a tape sample from its release liner. It could be thought of as related to a peel test, except that instead of measuring the force required to remove the tape from a bonded substrate, it is a measure of force to remove the tape from the liner, expressed in force per width.

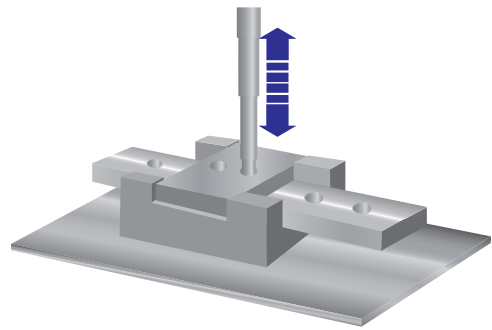
The test is performed using a long strip of tape which is separated from the liner at high speed. The test machines typically ramp up speed quickly, to around 2 m/s (78 in/s).

It is important to be aware that the release force varies with speed, and can be different when removing the tape from the liner at high speed versus lower speed. This can have implications for the end user, depending whether they plan to remove the liner by hand, or in an automated high speed process.

Tack

Tack is a measure of the initially stickiness of a tape – how sticky it feels when barely touched upon a surface, with no long dwell times or pressure applied. There are several methods commonly used when measuring tack – probe tack, loop tack and rolling ball tack.

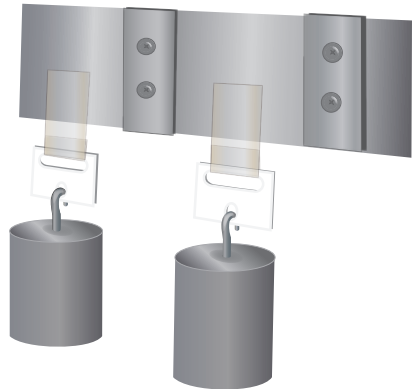
A probe tack test involves moving a probe mechanically to briefly touch and pull away from the tape surface measuring the force required. The probe is typically stainless steel, but other materials can be used.



Shear

Shear is a measuring of the internal strength, or cohesion, of the tape – a measure of the load bearing properties of the tape.

The test is performed by sticking a known surface area of tape (often 1 square inch) to a test surface and then hanging a weight from the tape. The time until the tape fails is measured – which can range from minutes to days depending on the particular tape and the weight applied.



S.A.F.T. (Shear Adhesion Failure Temperature)

SAFT is a special modification on a standard shear test, designed to show the heat resistance of a tape in a load bearing situation. The sample assembly is identical to the shear test described above, but the test is then performed inside an oven. The oven is programmed to increase in temperature over a defined period of time (often 1°F per minute, for example) until a maximum temperature of around 400°F is reached, at which point the temperature is held constant. Instead of reporting a time to failure, as in a conventional shear test, SAFT results are reported as the temperature at which the sample failed during the ramp up cycle of the oven.

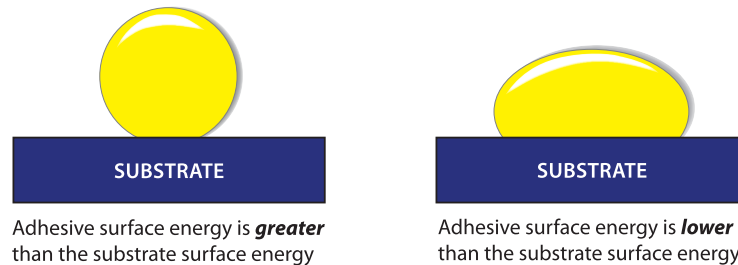
UNDERSTANDING HOW TAPE WORKS

Many different factors can have an effect on how well a tape will bond to a surface. Understanding these factors and how to control them can help ensure that the tape will perform as expected in your application.

In particular, it is important to consider surface energy, surface contaminants, roughness, overall shape, temperature and time. All of these play a role in how well and how quickly the tape will bond.

Surface Energy

The surface energy of a substrate (and an adhesive) will determine how easily the adhesive will wet out on the surface and how quickly an optimal bond will form. The term wet out refers to the flow of the adhesive across the substrate, forming close contact and therefore a strong bond. For a tape to wet out a substrate quickly, the surface energy of the adhesive must be lower than the surface energy of the substrate. This is common when bonding to metals and many engineered plastic, and so good bonds form readily with many different adhesives. When bonding to low surface energy materials (such as polyethylene, polypropylene and many powder coated metals) the adhesive could have a higher surface energy than the substrate and so not wet out rapidly. Rubber adhesives are generally lower surface energy than acrylics, and so will often bond more quickly. Also, additional treatments can be applied to the substrate (such as corona or plasma treatment) in order to temporarily raise its surface energy and therefore promote good bonding.



Contaminants - Cleanliness

When a tape bonds to a surface, it forms an intimate contact between the adhesive and the surface. If there are contaminants on the bonding surface (such as dust, oil, rust etc.) then the adhesive will contact those materials, and not the surface underneath.

In this case, the amount of adhesive contacting the substrate is reduced, as so, the strength of the adhesive bond is also reduced, and the tape may fail in the application.

Having a clean, dry surface is important to forming a good bond.



Rough surfaces

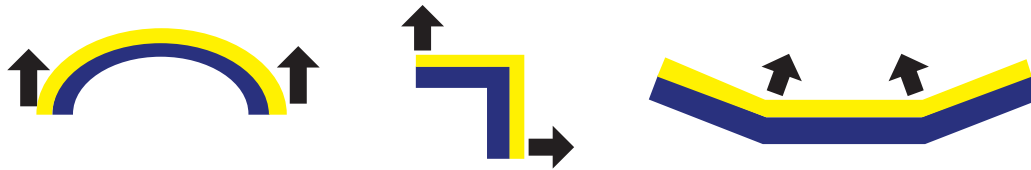
Sometimes the surface that the tape will stick to is not smooth – for example, wood, foams, textiles, or a plastic surface with an embossed texture. In these cases, the adhesive contact will initially be strongest only at the high points of the surface. Over time, or with pressure, the adhesive will flow and start to fill out the texture of the surface. Of course, it becomes important to use a thick enough tape to allow the adhesive to fill the depth of the texture. Thinner tapes may not be able to fill all of the surface voids, and may struggle to provide a strong enough bond.



Some adhesives will flow more than others, and more easily fill voids on the surface of the substrate. If the texture is extreme, then it may become necessary to choose a very aggressive adhesive in order to maximize the bond strength in the areas where contact occurs.

Curved surfaces

When bonding to a surface that is not flat, some additional factors can start to affect bonding. The curved, or angled surface will induce forces on the edges or bend points in the tape, which can result in a debonding peel force and cause the tape to pull away from the surface. These forces are indicated by the arrows in the diagrams below. More flexible tapes will obviously conform better to the surface.



In these cases it becomes important to ensure that the tape selected has a strong enough adhesion to overcome these forces. This may require selection of a quite different tape than would be used to bond to the same material on a flat surface.

Time and Temperature

The way that a PSA tape performs is related to both time and temperature. A tape that bonds very well at room temperature but not perform as well if you try to form a bond at much lower temperatures. That's why our data sheets provide a minimum application temperature. The adhesive will become "glassy" as it gets cold and appear less tacky. The tack will recover though as the tape warms up again.

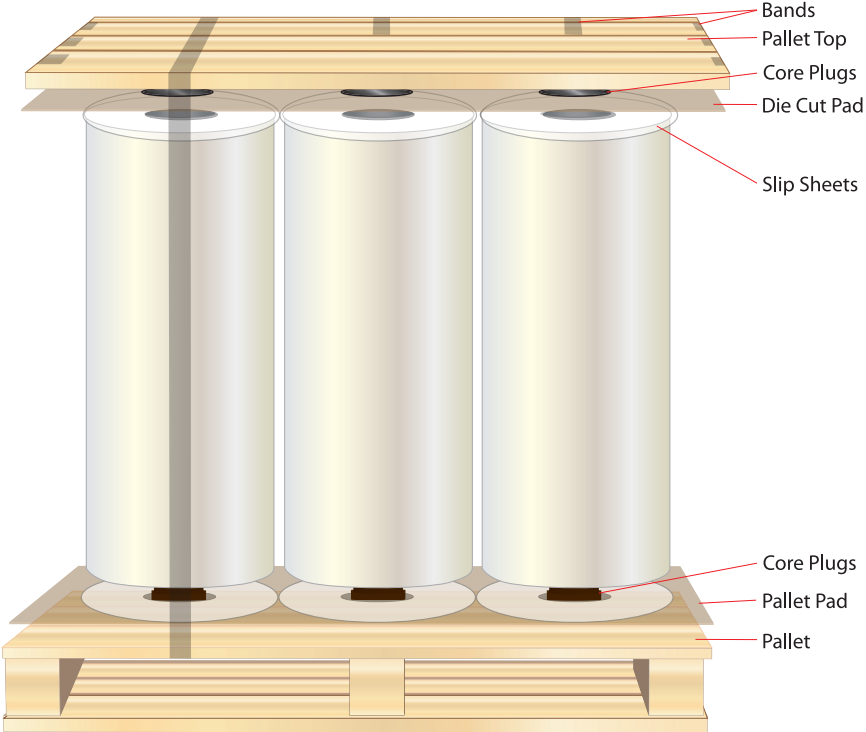
Time is also a very important factor to consider when using a tape. The adhesive on a tape needs time to flow and wet out the surface fully. As such, the bond strength will increase over time on most tapes, reaching its maximum strength a day or more after the bond is made. This is important to consider for applications which need to bear a load soon after bonding – a faster wetting, more aggressive product may be needed. At higher temperatures, wet out will be faster and bond strength will increase more quickly. This process will be slower at lower temperatures.

All of these points demonstrate the importance of testing a tapes performance in your exact application – which can differ substantially from the "ideal" situation represented on a product data sheet. At CCT we are happy to help translate your product needs into the ideal tape for your application.

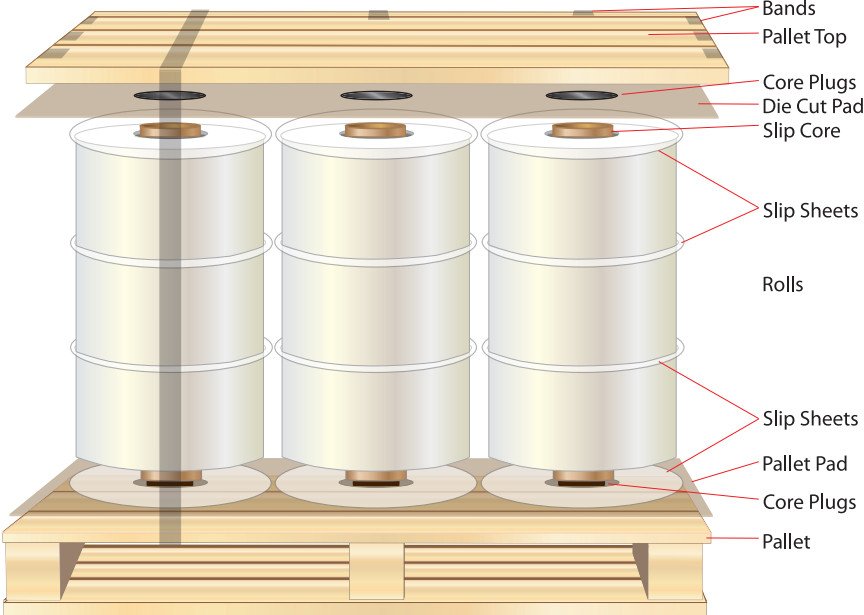
STANDARD PACKAGING

PSA rolls are pallet packed as illustrated below. Pallet size and configuration are setup to best match roll width, length and quantity. Each stack of rolls are individually bagged with thick polyethylene bags. The pallets are stretch wrapped as a last step in packaging. A minimum of five wraps are used for added protection and stability. Custom packaging and boxing is available for an additional charge.

BULK PACKAGING 9 ROLL CONFIGURATION



SLIT ROLL PACKAGING



ORDERING INFORMATION

Our customer support team is ready to assist you. Please contact us if you need product, technical or application assistance.

Phone: 215-271-0610

Sales: Sales@CCTtapes.com

Customer Service: Customer.Care@CCTtapes.com

CCT pressure sensitive adhesive tapes are manufactured at 44", 54" and 60" wide, as standard, with wider widths available.

For narrower width rolls, slitting services are available. Our slitting capability provides everything from edge trimming down to 0.25" slit widths. For slit sizes of 6" and greater, slit roll pricing is based on the full web width of the master roll. Total yield of the master width including any resulting offcut will be billed.

Converter roll lengths are typically 750 up to 3,000 linear feet. Longer rolls may be available based on product, raw materials and CCT manufacturing limitations. Contact your CCT Technical Sales Representative for availability and pricing.

CCT prices and sells products in \$/MSI (\$/thousand square inches). The conversion factors listed here will help change MSI to alternative units of measure.

MSI	Square Feet	MSI	Square Yards	MSI	Square Meters
1	6.944	1	0.772	1	0.645
0.144	1	0.1296	1	1.55	1

Conversions for standard roll sizes

Roll Size	MSI	Square Feet	Square Yards	Square Meters
44" x 750'	396	2,750	305.7	255.5
54" x 750'	486	3,375	375	313.5
60" x 750'	540	3,750	416.9	348.3

Roll Width	MSI to Linear Feet	Linear Feet to MSI
44"	1.894 x MSI	0.528 x LF
54"	1.548 x MSI	0.648 x LF
60"	1.389 x MSI	0.720 x LF

1. Parties. Coating and Converting Technologies, Inc, will be referred to as CCT and the person or company purchasing will be referred to as "Purchaser". All materials, goods, or work described herein, regardless of type, will be referred to as "Products".

2. Price and Payment: The price stated on the Sales Order Acknowledgement and the Invoice is FOB origin, unless otherwise agreed to in writing by CCT. The prices stated on the invoice do not include any sales, use or other taxes unless so stated specifically. All prices are subject to change without prior notice; however, prices shall be those contained in the CCT Price Quotation covering the products offered and in effect on the "Ship Date" noted on the CCT Sales Order.

Unless otherwise specified by CCT, payment is due in full 30 days from invoice date. Invoices not paid 30 days after their due date, will be subject to carrying charges. Carrying charges shall accrue and be added to the overdue unpaid balance at the rate of 1½% per month, or the maximum allowed by law, whichever is less. If the Purchaser fails to make any payment due, CCT may at its option defer further manufacture, or shipment of orders, or cancel any orders until such payment is made. The Purchaser agrees to pay any and all costs and expenses of collection, including attorney fees incurred by CCT.

3. Shipment and Transportation Charges: Unless otherwise specified by CCT in writing, all shipments shall be FOB origin. All shipments shall be via motor carrier selected by Purchaser. Risk of loss shall pass to Purchaser upon pickup by carrier at CCT's dock, regardless of the freight payment terms. All delivery dates are approximate and partial deliveries are permissible. CCT reserves the right to ship all orders up to 5 days prior to the expected ship date. CCT shall not be liable for damages of any description arising from delay in shipment or delivery.

Shipment of Products shall be subject to Purchaser maintaining credit standing satisfactory to CCT. CCT may delay or suspend shipment at any time, pending receipt of adequate assurances from Purchaser (in CCT's sole discretion) of Purchaser's ability to pay. CCT may require payment in full, or partial prepayment, or payment of any, or all, outstanding amounts owed before shipment of the Products. CCT shall be entitled to cancel Purchaser's order in the event Purchaser fails to provide adequate assurances, without further liability or obligation to Purchaser.

4. Changes/Cancellation: Orders placed and accepted by CCT (all orders are subject to acceptance by CCT's corporate office) may not be changed or cancelled except upon terms that will fully compensate CCT against loss. Orders for non-standard or custom products manufactured to Purchaser's specifications may be cancelled only prior to the commencement of manufacture and only to the extent that CCT is able to cancel orders for raw materials ordered for the manufacture of such products. Purchaser shall be liable to CCT for the cost of such materials and all tooling and set-up costs.

5. Returned Products/Claims: Risk of loss or damage during shipment is upon Purchaser. Any claim for loss or damage to Products during shipment shall be made by the Purchaser to the freight carrier.

Within fifteen (15) days after delivery to Purchaser of Products, Purchaser must give written notice to CCT of any claim by the Purchaser based on the condition, quality or grade of products, shortages, or of any claimed nonconformity with Purchaser's

specifications. Failure to give timely notice in accordance with this paragraph shall bar any claim with regard to same, shall constitute irrevocable acceptance by Purchaser of the Products and shall bind the Purchaser to pay full invoice price thereof. Accepted products shall not be returned without CCT's prior written consent and issuance of a Return Material Authorization (RMA) number and designated freight carrier.

6. Force Majeure: CCT shall not be liable for delays or defaults in the delivery caused by accidents, strikes, fires, floods, acts of God or public enemy, labor unrest, shortages of raw material, fuel or labor, interruption of transportation, governmental regulation or restriction, or any causes outside the Seller's reasonable control.

7. Limitation of Liability: In no event shall CCT be liable for any incidental or consequential damages, including but not limited to, loss of profit, loss of use of production, loss of capital, or loss of material. Purchaser's remedies are limited to set forth herein are exclusive and the total liability of CCT with respect to any contract, or anything done in connection therewith such as the performance or breach hereof, or from the manufacture, sale, delivery, resale, installation or use of products whether arising out of contract, negligence, strict tort, or under any warranty, or otherwise, shall not exceed the purchase price of the products upon which the liability is based.

8. Limited Warranty: Unless stated otherwise in CCT's literature, packaging inserts or product packaging for individual products, CCT warrants that each CCT product meets the applicable specifications at the time CCT ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. CCT makes no other warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or any implied warranty arising out of a course of dealing, custom or usage of trade. Purchaser is responsible for determining whether the CCT product is fit for a particular purpose and suitable for Purchaser's application. If the CCT product is defective within the warranty period, Purchaser's exclusive remedy and CCT's and seller's sole obligation will be, at CCT's option, to replace the product or refund the purchase price.

9. Overrun: CCT, reserves the right to deliver an overrun or under run not to exceed the range specified on the face of the quote.

10. Assignment: Purchaser may not assign its rights or obligations hereunder without the prior written consent of CCT and any purported assignment without such consent shall be void and of no effect.

11. Entire Agreement: The provisions contained on the CCT Sales Order Acknowledgement hereof are incorporated into these terms and conditions of sale by reference. Purchaser and CCT acknowledge that these terms and conditions of sale, together with CCT's invoice, constitute the entire agreement between Purchaser and CCT with regard to the sale or transfer of the products and supersede all prior oral or written statements of any kind made by the parties or their representatives. These terms and conditions of sale may not be amended, modified or supplemented except by written agreement executed by the Purchaser and CCT. The terms and conditions of sale are hereby deemed by the parties to be severability and the invalidity of unenforceability of one provision shall not affect the validity and enforceability of any other provision.



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