

工程指示 / 要求簡箋(E.I.)

工程指示編號：EI / 4067/21

修改版次：-

工程編號：J857

工程名稱：啟德 6552

工程項目：廠用 3M 牌保護膠貼(幕牆玻璃位置)

收件人：Maggie Lor (羅小姐)

發件人：Yancy Chen

日期：24/11/2021

要求提供 / 確認 事項：

- | | | |
|------------------------------------|-------------------------------------|-------------------------------|
| <input type="checkbox"/> 初步鋁料 B.M. | <input type="checkbox"/> 加工拆圖，然後生產 | <input type="checkbox"/> 尺寸表 |
| <input type="checkbox"/> 正式鋁料 B.M. | <input type="checkbox"/> 技術上資料 / 指示 | <input type="checkbox"/> 報價 |
| <input type="checkbox"/> 配件 B.M. | <input type="checkbox"/> 樣辦或貨品說明書 | <input type="checkbox"/> 分判合約 |
| <input type="checkbox"/> 其他：_____ | | |

內容：

請按附件資料，型號: 331TB-N(膠貼厚度 0.07mm)，訂購 3M 牌保護膠貼。

玻璃面（內外兩面）的面積合計，約 32,000 平方米。

(另外，附上裕民建築有限公司原合約要求，供參考)

請在 3/2022 前完成上列要求。

附：1+ 16 頁

以上項目為：

- 原合約工程包 原合約工程加 / 減賬 新工程報價

原因：-

分發東莞各部門：

- () 生產技術總監 連附件 () 技術部 連附件 () 生產部 連附件 () 機械設計部 連附件
 () 採購部 連附件 (✓) 生產統籌部 連附件
 (✓) 質檢部 連附件 () 會計部 連附件 () 報關組 連附件 () 其他 _____ 連附件

分發香港各部門：

- () 行政部 連附件 () 會計部 連附件 () 統籌部 連附件 () 工程部地盤科文 連附件
 () 採購部 連附件 () QS 部 連附件 () 維修部 連附件 () 其他 _____ 連附件

傳遞編號：

HK 2137 / 21

發件人簽署：

項目經理簽署：

3M Hong Kong Limited

5th Floor, Victoria Centre
15 Watson Road, Hong Kong
Tel: 2806 6111 Fax: 2807 1308
Website: www.3M.com.hk



Date: May 23, 2018

Re: 3M™ Protective Tape 331 Series

To: Valued 3M Customers

We are writing to inform you that 3M™ Protective Tape 331 Series do comply with the European Union regulation REACH (Registration, Evaluation, Authorization and Restriction of Chemicals).

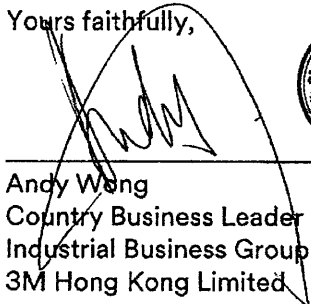
According to our source of supply, we have product name changes since June 2017. Please refer to the table below for updated product name. And we are sorry to inform you that we are facing supply shortage at this moment which results in unexpected long leadtime of 16 weeks. We are doing everything possible to minimize any negative impact to your operations and to resume supply as quickly as possible.

Previous Product Name	New Product Name
331T	331-N
331B	331B-N
331TB	331TB-N

We apologize for any inconvenience this issue may have caused you. If you have any questions, please contact Mr. Horace Tong, Sales Manager, Industrial Adhesives and Tapes Division at 2806 6387 or hktong1@mmm.com.

Thank you for your understanding and continued partnership with 3M.

Yours faithfully,


Andy Wong
Country Business Leader
Industrial Business Group
3M Hong Kong Limited



3M Electronics Materials Solutions Division
Technical Data Sheet

2017年 4月

3M™ 表面保護用テープ
331TB-N

1. 概要：

このテープは、塩化ビニールフィルムにアクリル系粘着剤を均一に塗布した粘着テープです。特にプリント基板の保護、ステンレス・アルミ板の加工、輸送時の保護、窓ガラスの養生用に開発されたものです。

2. 構造：



3. 特徴：

- ①青色透明の粘着テープです。
- ②使用後、テープを剥離してもほとんど糊残りがありません。
- ③シリコーン背面処理をしていないため、シリコーン移行のトラブルを防止できます。

4. 用途案：

- ①プリント基板メッキ時蒸気マスクング用
- ②ステンレス・アルミ板の加工、輸送、保管時の保護用
- ③窓ガラスの養生

5. 一般特性

項目	単位	測定値
テープ厚	mm	0.070
引張強度	N/cm	28
伸び	%	250
粘着力 (180°方向)	N/cm	0.25

6. 被着体別、経時後粘着力 (180度方向)

被着体	初期値	常温3ヶ月	50°C95% 2週間
ステンレス板	0.25	0.63	0.86
A B S 板	0.61	0.92	0.90
ポリカーボネート板	0.99	1.13	0.78

(単位：N / cm)

7. 耐熱性

	90°C	120°C	150°C	160°C	180°C	190°C
ステンレス板	○	○	○	○	○	○
アルミ板	○	○	○	○	○	○
ガラス板	○	○	○	○	○	○

○：糊残りなし △：微小あり ×：糊残りあり

※各温度に60分間静置し、取り出し直後に180°方向に高速剥離を実施し表面を確認。

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3M は、3M 社の商標です。

3M


スリーエム ジャパン株式会社
電子用製品事業部
<http://www.mmm.co.jp/eas/>

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EMMD-TDS-331TBN


カスタマーコールセンター

製品のお問い合わせはナビダイヤルで

 **0570-011-007**

8:45～17:15 / 月～金 (土日祝年末年始は除く)
全国どこからでも市内料金でご利用いただけます

カタログ等各種資料の請求はFAXで

 **0120-282-369**

24時間受付 / 年中無休
フリーダイヤルでご利用いただけます

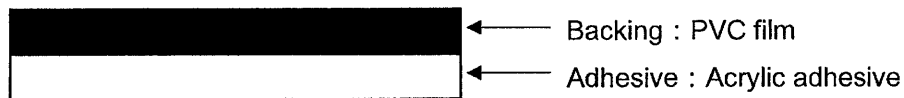
Technical Data Sheet

May. 2017

3M™ Surface Protection Tape 331TB-N

1 . Description : Surface protection tape 331TB-N is made from PVC film backing with acrylic adhesive. They are suitable for temporary protection of PCB, metal, glass substrate in process, transportation and so on.

2 . Product construction :



- 3 . Feature :
- ① Blue color tape
 - ② No or less adhesive residue after removing the tape
 - ③ Prevent silicone transfer issue (doesn't use silicone material in the product.)

4 . Property :

Item	unit	Data	Test condition
Tape thickness	mm	0.070	-
Tensile strength	N/cm	28	Sample width: 25mm, Tensile speed: 300mm/min Initial gap: 100mm
Elongation	%	250	
Adhesion to SUS	N/cm	0.25	Test surface: stainless steel Applied pressure: 2kg rubber roll Peel: 180 degree, 300mm/min, R/T

Specifications and appearance may be changed without prior notice. All statements, technical information and recommendation herein are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liability whatsoever in connection with such use. Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. The statements contained herein are made in lieu of all warranties, expressed or implied. Any statements or recommendations which are not contained herein shall have no force or effect unless contained in an agreement signed by an authorized officer of seller and manufacturer.



3M Japan Limited

TDS-331TBN(E)

裕民建築有限公司

Curtain Wall, Windows, Cladding and Glass Door for Residential Towers 工程章程

Part 1 - 玻璃幕牆及鋁板

地盤：啟德 NKIL 6552

(II) 工料及技術規範：(續)

(二) 臨時保護工作要求：

A. 保護工作包括如下：

1. 原廠膠紙或保護封套必須包括於框料表面貼三層保護膠紙、橫料加包角及於所有轉角位包泡膠紙 (參閱 Part 1 章程附件(四)); 第一層保護膠紙用於保護框料表面, 貼後生窗仍能開啓; 第二層保護膠紙用於保護生窗與窗框之間免被石矢漿滲入, 貼上後生窗不能開啓, 於安裝玻璃時亦不需撕掉第二層保護膠紙; 第三層保護膠紙為最外層之保護, 保護所有外露部份, 在安裝玻璃時需將第三層保護膠紙撕掉; 第三層保護膠紙的顏色需有別於第一及第二層以茲識別。
2. 所有玻璃面 (內外兩面) 貼上“3M”牌 0.07mm 或同等級保護膠貼, 參考物料規格見 Part 1 章程附件(五), 有關材質需要提交主判人審批。
3. 安裝玻璃後, 於室內及室外位置用 2mm 厚瓦通板覆蓋整塊玻璃。

(三) 清潔要求：

- A. 承判人包人手、工具及機械於交樓前須做妥一切清潔 (合約內所有工作範圍) 至交主判人為準。
- B. 不得使用沙粉類或含鹼性清潔劑清潔任何外露表面。清潔劑需測試清潔效果是否適合並不會損害玻璃/鋁板表面。

(四) 可容許偏差

玻璃幕牆工項可容許偏差應依照 Part 1 章程附件(十一) 及 Technical Specification (如適用), 若 Part 1 章程附件(十一) 及 Technical Specification (如適用) 所要求的可容許偏差有所不同, 則以較高要求者為準; 若因承判人施工品質問題而引致上述工項超出此可容許偏差, 一切所需打鑿、修補或重做等補救工作及相關的費用, 均全部由承判人負責賠償。

(III) 計算規範：

除下列特別說明外, 計算以“工程量計算規則” *Standard Method of Measurement of Building Works for use in Hong Kong – Fourth Edition (HKSM4) 及 Preamble* 處理。

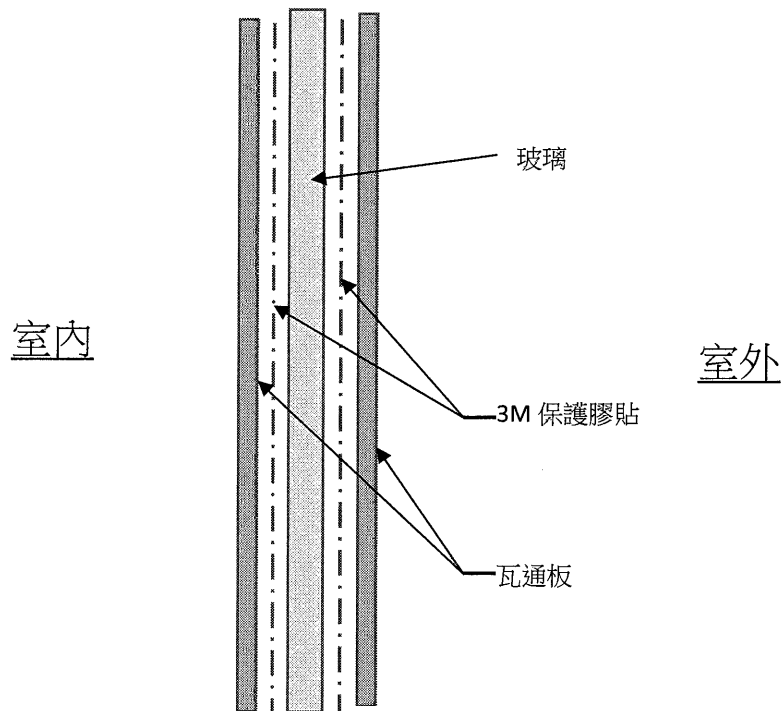
(一) 專項計算規範：

- A. 以下各項工作 (如適用), 已包於各工程單價內 (特別說明除外), 不另計價：
 1. 提供墨線、平水
 2. 接駁臨時水、電 (由主判人負責提供電箱及水喉位, 承判人自行接駁取用)
 3. 搭、拆工作位置 高度不超過 3.5m 之棚架、工作台、安全圍欄等
 4. 清理坭頭垃圾及搬運至主判人指定地方
 5. 材料上落運輸
 6. 繪製施工圖則
 7. 管理、仕務等費用
 8. 各類工程及 BD 要求的測試 (實地試水及 Performance Test 除外)
 9. 配合樣辦房/層 (Construction Sample Floor / Sample Flat Mock Up 要求), 先做幕牆/飾面之 Sample Floor / Sample Flat Mock Up 部分, 包一切所需提早生產及供裝費用, 另包日後所需之維修/更換, 以達至完工交貨要求
 10. 包提交一切所需之質量保證書及包於保證期內做妥執修工作
 11. 包工料做妥一切所需 Equipotential Bonding 接駁

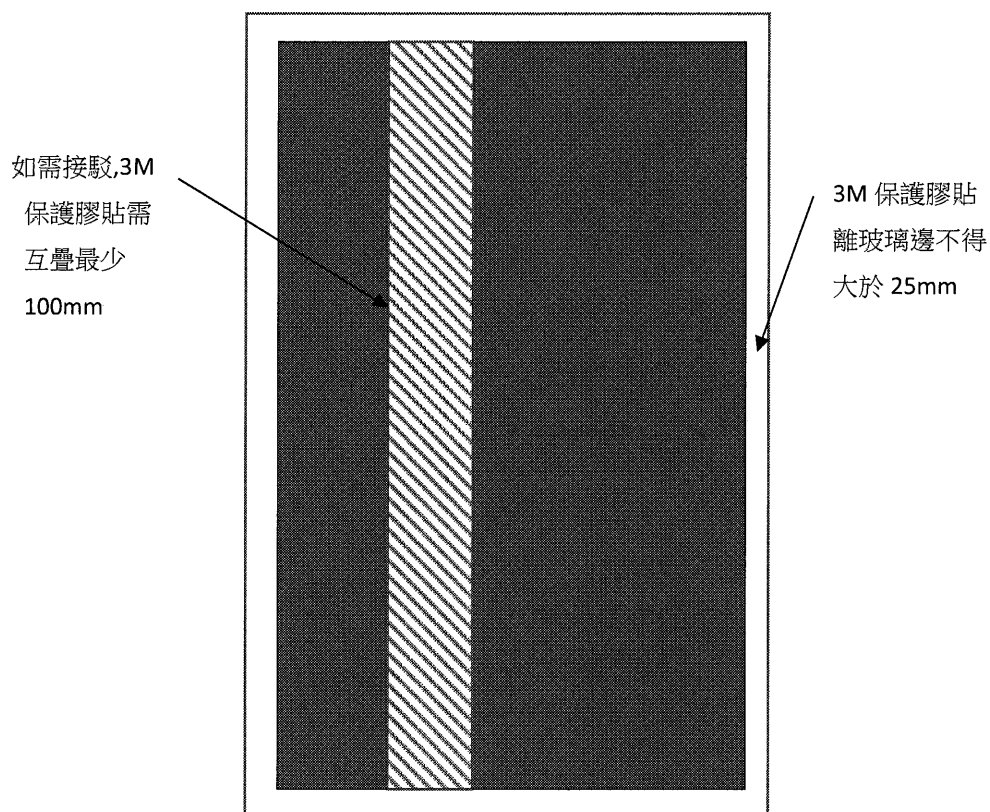
(二) 特殊計算規範：

- A. 立面項目及數量
 1. 投標商於計算投標數量時不能只於立面圖則 (Elevation) 量度數量, 必須盡量參考平面圖、大樣圖等互相關聯對應計算, 並將轉接收口位置包括在項目單價或投標數量之內。
- B. 計算單位 (特別說明除外)
 1. Girth 大於 300mm, 以平方公尺計算
 2. Girth 少於或等於 300mm, 以直公尺計算

3M 保護膠貼安裝標準圖示

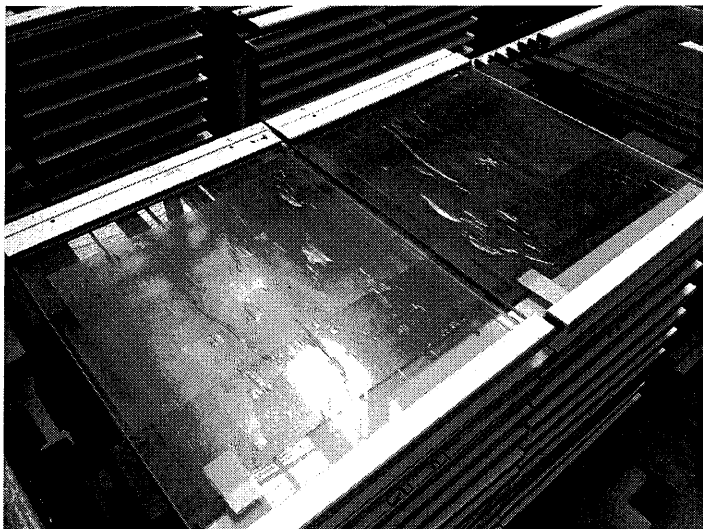


玻璃臨時保護標準示意圖

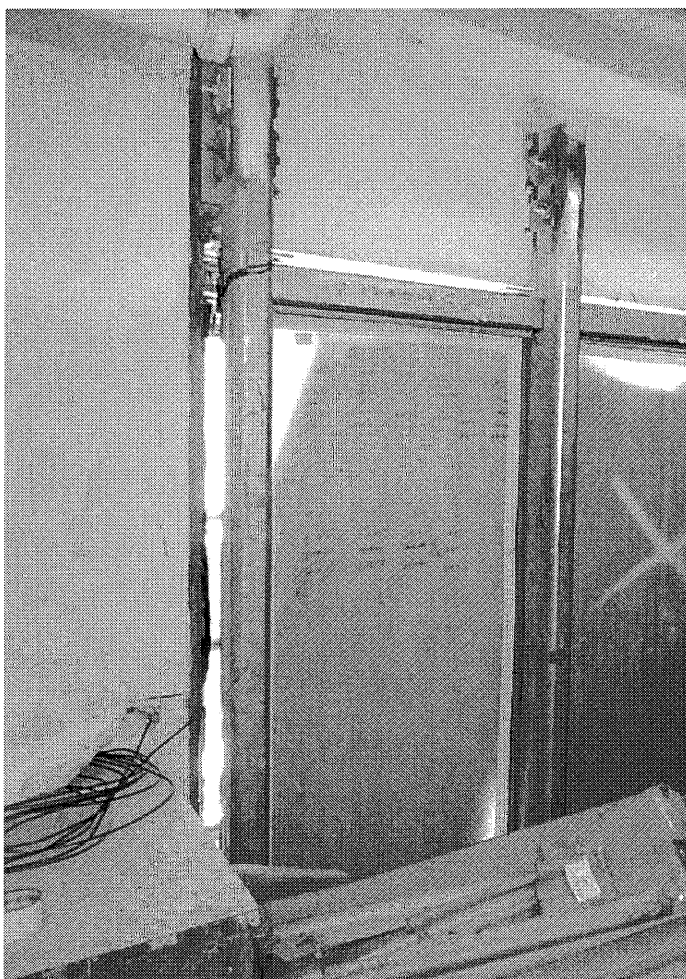


玻璃正面

Curtain Wall, Windows, Cladding and Glass Door for Residential Towers 工程章程
Part 1 章程附件(五)



玻璃附有 3M 保護膠
貼



玻璃附有瓦通板保
護



**Scotch Brand 331T
Vinyl Protective Film**

Technical Data

May 1, 2000

PRODUCT DESCRIPTION 331T

FEATURES

- Excellent Indoor and Outdoor Weatherabilities
 - No Adhesive Residue
 - Excellent Conformability
 - No Silicone Adhesive Residue (ideal for electronics industry)
 - Materials free of dirt, dust, foreign material
 - Free of Wrinkles
-

APPLICATION IDEAS

- Protection of Nameplate
 - Protection of Watch Surface
 - Vapor Masking of PC Board
 - Protection of Stainless Steel and Aluminum Panel during transportation and storage
 - Protection of Window Panel with Curvature
-
-



Scotch Brand 331T Vinyl Protective Film

PRODUCT CONSTRUCTION

Material : Vinyl Chloride Film
Adhesive : Acrylate
Color : Blue Transparent
Transparent

TYPICAL PHYSICAL PROPERTIES

Average Physical Properties	Unit	Value	Test Method
Total Tape Thickness	mm	0.070 +/- 0.010	JIZ-Z-0237
Tensile Strength at Break	kg / 25mm	4 and over	JIZ-Z-0237
Elongation at Break	%	200 and over	JIZ-Z-0237
Adhesion (180° Peel)*	g / 25mm	65 +/- 20	JIZ-Z-0237

Test Method

1. Substrate: Stainless Steel Panel (treated by abrasion with #280 abrasive)
2. Preparation Conditions for Test Sample:
 - 2 kg roller
 - 300 mm/minutes
 - 1 reciprocating motion
 - 20 minute dwell time
3. Measurement Condition:
300 mm / minute

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**Scotch Brand 331T
Vinyl Protective Film**

ADHESION AFTER AGING (180° Peel)

Substrate	Initial Value	Value After Aging**	Value After Accelerated Aging***
Stainless Steel Panel*	65 g/25mm	170 g/25mm	260 g/25mm
ABS Panel	150 g/25mm	260 g/25mm	340 g/25mm
PC Panel	230 g/25mm	250 g/25mm	290 g/25mm

*Substrate : Stainless Steel Panel (treated by abrasion with #280 abrasive)

** Aging Test : Measured after having left 331T in a room for three months after application

***Accelerated Aging : Measured after having left 331T for two weeks at 50°C and 95% Relative Humidity

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**Scotch Brand 331T
Vinyl Protective Film**

HEAT RESISTANCE PERFORMANCE

Substrate	90°C	120°C	150°C	160°C	180°C	190°C
Stainless Steel Panel	O	O	O	O	O	O
Aluminum Panel	O	O	O	O	O	O
Glass Panel	O	O	O	O	O	X

O : no adhesive residue is found

X : adhesive residue is found

Test Method

- Preparation Conditions for Test Sample:
 - 2 kg roller
 - 300 mm/minutes
 - 1 reciprocating motion
 - 20 minute dwell time
 - Measured after leaving 331T for 60 minutes at each ambient temperature
 - Measurement Method:
After taking out test samples, 331T is peeled in the direction of 180° with quick motion and then observe the surface
-

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**Scotch Brand 331T
Vinyl Protective Film**

CHEMICAL RESISTANCE PERFORMANCE

Substrate	MEK	ETHANOL	KEROSIN	WATER
Stainless Steel Panel	O	O	O	O
Aluminum Panel	O	O	O	O
Glass Panel	O	O	O	O

- O : no adhesive residue is found
X : adhesive residue is found

Test Method

- Preparation Conditions:
 - 2Kg roller
 - 300mm/minutes
 - one reciprocating motion
 - Measured after leaving 331T for 60 minutes at each ambient temperature
 - Measurement Method:
After having allowed test samples to dry, 331T is peeled in the direction of 180° with quick motion and then observe the surface
-



Scotch Brand 331T Vinyl Protective Film

Application and Surface Contact

To obtain maximum adhesion, surfaces must be unified, dry, and free of contaminants. Surface contact is fundamental to adhesive performance. To maximize contact on a substrate :

- Clean surface with low strength solvents such as isopropyl alcohol (rubbing alcohol) or heptane.

Note: Be sure to follow the solvent's manufacture's precautions and directions for use when using solvents.

- Apply firm pressure to increase the cold flow and contact of the adhesive with the substrate.

Note: Product selection is ultimately the user's responsibility. Users should conduct their own tests under actual use and storage conditions to determine whether the product is fit for a particular purpose and method of application



Scotch Brand 331T Vinyl Protective Film

Important Notice

3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M ITSD product in a particular application. The material to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M ITSD product. Given the variety of factors that can affect the use and performance of a 3M ITSD product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M ITSD product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

Limitation of Remedies and Liability

If the 3M product is proved to be defective. THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M PRODUCT. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.



Industrial Tape and Specialties Division

Technical Information

**Scotch™ Brand No.331-T
Protective Tape**



SCOTCH BRAND NO. 331-T PROTECTIVE TAPE

DESCRIPTION :

A PVC tape with a high performance adhesives which has uniform adhesive thickness.

331-T protective tape resist to solvents, moisture and high temperature.

This tape can be applied for mainly wafer dicing process of semiconductor manufacturing.

331-T protective tape do not contain any dust or foreign materials and free from defects such as dirt or wrinkle.

CONSTRUCTION :

Backing : PVC Film

Adhesive : Acrylic

Color : Transparent Blue

PHYSICAL PROPERTIES : Not Recommended for Specification Purposes

		<u>ASTM METHOD</u>
Adhesion to Steel :	65 g/in. width	D-3330
Tensile Strength :	4 kg/in. width	D-3759
Elongation at Break :	200 %	D-3759
Total Thickness :	0.07 mm	D-3652

GENERAL INFORMATION :

1. In general, 331-T protective tape is specially designed for the manufacturing process of semiconductor. Adhesion level of this tape is well controlled to ensure the holding of wafer in dicing, breaking and make it easy to pick up chip after processing.

However, the following precautions should be noted.

- Extended exposure to direct sunlight
- Elevated storage temperatures
- High Stacking Pressures

2. Where storage conditions are $21 \pm 2^{\circ}\text{C}$ and $50 \pm 10\%$ R.H. shelf life is 6 Months.

POSSIBLE USES :

Protection wafer during dicing process of semiconductor manufacturing.