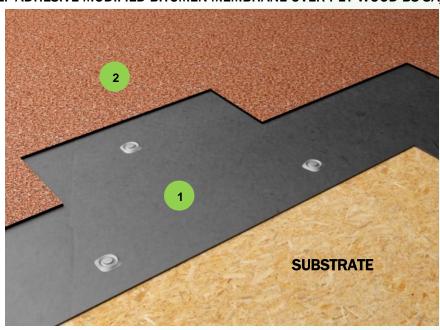


## THERMOTEK™ SELF-ADHESIVE SYSTEM **G2 + MODIFIED BITUMEN MEMBRANE OVER PLY-WOOD**

SELF-ADHESIVE MODIFIED BITUMEN MEMBRANE OVER PLY-WOOD BS-SA/CS



- 1. G2 FIBERGLASS BASE SHEET
- 2. THERMOTEK™ SELF ADHESIVE POLYESTER GRANULATED

#### COMPONENTS AND WEIGHTS

			CO	MPONENIS	AND WEIGHT	5			
	Coat	Product	Coverage (100 sq.		Dry Weight Lb		Dry Mils		
			ft.)	3.0	0 mm	3.5 mm	3.0	mm	3.5 mm
5	1	1 G2 FIBER GLASS BASE SHEET 270 sqft 27.66 LBS/SQ		sQ	50.0 Mils				
SYSTEM	2	THERMOTEK™ SELF ADHESIVE POL. GRAN.	89 sq ft	84.55	5 LBS/SQ	98.64 LBS/SQ	118.11 Mils 137.79 Mils		137.79 Mils
S	SYSTEM			112.2	1 LBS/SQ	126.3 LBS/SQ	168.1	L1 Mils	187.79 Mils
ICAL	THERMOTEK™ DURA MASTIC Vari		Variable	Variable		Variable			
CRITICAL	THERMOTEK™ SELF ADHESIVE POL. 2.0 BS		Variable		Variable		Variable		
			SILVER +	GOLD +	PLATINUM +	SILVER +	GOLD +	PLATINUM +	
AAL 24	1	THERMOTEK™ COATING	1 gallon	6.24 LBS/SQ	7.25 LBS/SQ	7.67 LBS/SQ	6.86 Mils	8.06 Mils	8.2 Mils
OPTIONAL TITLE 24	2	THERMOTEK ™ COATING	1 gallon	6.24 LBS/SQ	7.25 LBS/SQ	7.67 LBS/SQ	6.86 Mils	8.06 Mils	8.2 Mils
P I	ADD TO SYSTEM		+ 12.48 IBS/S0	+ 14.5 IBS/S0	+ 15.34 IBS/S0	+13.72 Mils	+16.12 Mils	+16.4 Mils	

<sup>\*</sup>Approximate measures



#### PART 1 - GENERAL

#### 1.1. SUMMARY

This document provides the specifications for the application of our product to roofing surface. These specifications should be used only as a general guide, with the addition of specific details as different job conditions.

These tools include roofing products, coverage rate, installation procedures with THERMOTEK™ Roofing Products and complementary products. Final determination of the fitness of the application of any THERMOTEK™ Roofing products shall not be made by anyone other than an authorized representative of THERMOTEK™ Roofing Products.

#### **1.2 APPLICABLE PUBLICATIONS**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only:

- A. American Society for Testing and Materials Publication (ASTM).
- B. Underwriters Laboratories Inc. (UL).
- C. CRRC Cool Roof Rating Council.
- D. California Building Standards Code Title 24.
- E. THERMOTEK™ Details, Drawings and Notes

### 1.3 QUALITY CONTROL

- A. Warranty: THERMOTEK™ GROUP guarantees that since our products are shipped from the production plant they will be free of manufacturing defects and defective materials. Liability, if any, is limited to product replacement from the completion date of the work.
- B. The manufacturer: shall certify that the materials submitted have been used in like application and that they have been actively engaged in the manufacture of these materials for a minimum period of 10 of 15 years prior to submittals, as required. The manufacturer shall certify that the contractor is authorized and approved for the application of their materials.
- C. Applicator Qualifications:
  - 1) Applicators shall have a minimum of 5 years experience in the application of roofing materials.
  - 2) The manufacturer shall certify that the contractor posses a current "Qualified Applicator" Certificate and that is authorized for the application of their materials.
  - 3) The applicator shall have general knowledge and understanding of roofing, as well for all THERMOTEK™ Roofing Products for any given specified project.
  - 4) For all warranties, a firm which has complete business stability shall perform the work in this section: present a copy of certification upon request by the Architect or the owner.
  - 5) The installer, owner or Architect must review all the documents related to all critical points and check list.
  - 6) For different roofing details and/or terms and conditions for warranty, the installer, owner or architect must contact a THERMOTEK™ Technical Representative. All issues about the roof must be resolved in writing.

#### 1.4 SUBMITTALS

In the normal course of bidding, descriptive literature, technical data, and wet or dry samples of all proposed materials for their use under these specifications, shall be submitted upon request.

#### 1.5 JOB CONDITIONS

To proceed with proper conditions, the applicator must be aware of the following:

- A. UV curing time for all products is critical. The applicator must allow sufficient cure time for each product. Please be aware that outside temperatures will be a factor.
- B. Do not begin work if rain or heavy dew is expected within twenty-four to forty-eight (24-48) hours after application.
- C. Do not begin work if temperatures are expected to fall below 50 °F and increase over 104 °F during the installation.
- D. Consider that other environmental conditions such as humidity, mist, dew, extreme temperatures and condensation, can affect products in an inconsistent way.
- E. This product has better drying with high humidity.

#### 1.6 PRODUCT STORAGE AND HANDLING

All the time, the THERMOTEK™ products should be stored at a temperature above 40 °F, in a warm, dry, clean and well-ventilated area.

### 1.7. PROTECTION OF PROPERTY

The contractor shall take proper precautions to protect owner's property against damage and overspray. The use of shield boards, maskings and protective coverings shall be necessary. THERMOTEK™ is not responsible for damages caused by the overspray of any of its products.



#### **PART 2 - PRODUCTS**

#### **COMPONENTS AND WEIGHTS**

	Coat	Product	Coverage (100 sq. ft.)
_	1	G2 FIBER GLASS BASE SHEET	270 sqft
SYSTEM	2	THERMOTEK™ SELF ADHESIVE POL. GRAN.	89 sq ft
S		SYSTEM	

COMMI CITETIO / UTD TVENGITIO				
Dry Weight Lb				
3.0 mm 3.5 mm				
27.66 LBS/SQ				
84.55 LBS/SQ	98.64 LBS/SQ			
112.21 LBS/SQ 126.3 LBS/SQ				

Dry Mils				
3.0 mm	3.5 mm			
50.0 Mils				
118.11 Mils	137.79 Mils			
168.11 Mils	187.79 Mils			

ICAL	THERMOTEK™ DURA MASTIC	Variable
POI	THERMOTEK™ SELF ADHESIVE POL. 2.0 BS	Variable

Variable	
Variable	

,	Variable
,	<b>Variable</b>

IAL 24	1	THERMOTEK™ COATING	1 gallon
LE 2	2	THERMOTEK ™ COATING	1 gallon
0P'		ADD TO SYSTEM	

SILVER +	GOLD +	PLATINUM +	
6.24	7.25 LBS/SQ	7.67 LBS/SQ	
LBS/SQ	1.25 Eb5/ 5Q	7.07 205/30	
6.24	7.25 LBS/SQ	7.67 LBS/SQ	
LBS/SQ	1.25 Lb3/3Q	7.07 EB3/3Q	
+ 12.48	+ 14.5	+ 15.34	
LBS/SQ	LBS/SQ	LBS/SQ	

SILVER +	GOLD +	PLATINUM +
6.86 Mils	8.06 Mils	8.2 Mils
6.86 Mils	8.06 Mils	8.2 Mils
+13.72 Mils	+16.12 Mils	+16.4 Mils

OPTIONAL – for a REFLECTIVE FINISH the applicator should add THERMOTEK COATING to the THERMOTEK™ SELF-ADHESIVE SYSTEM - G2 + MODIFIED BITUMEN MEMBRANE OVER PLY-WOOD (TITLE 24 COMPLIANCE).

#### 2.1 MATERIALS

#### A. SYSTEM

- G2 FIBERGLASS BASE SHEET
- THERMOTEK™ SELF ADHESIVE POLYESTER GRANULATED

### **B. CRITICAL POINTS**

- THERMOTEK™ DURA MASTIC.
- THERMOTEK™ SELF ADHESIVE POLYESTER 2.0 BASE SHEET

#### C. OPTIONAL

THERMOTEK™ ACRYLIC ELASTOMERIC COATING

#### 2.2 PRELIMINARY DETAILED INSPECTION

Inspect the preliminary work area and flashing details for problem areas (e.g. gaps, cracks, fishmouths, air pockets, etc.) to ensure the work be satisfactorily completed. Inform project Architect and THERMOTEK™ Technical representative when all preliminary work and flashing details are completed, in order the installer gets ready to proceed with application of THERMOTEK™ SELF-ADHESIVE SYSTEM - G2 + MODIFIED BITUMEN MEMBRANE OVER PLY-WOOD. Allow a minimum of two weeks for the interim inspection. Any final roofing installation prior to this interim inspection is subject to rejection by the Project Architect and/or the THERMOTEK™ Technical representative. Please be aware that technical on-site support for instructing certified contractors in the proper application of the THERMOTEK™ SELF-ADHESIVE SYSTEM - G2 + MODIFIED BITUMEN MEMBRANE OVER PLY-WOOD is available.

### 2.3 PROCEDURE, COVERAGE RATE & APPLICATION INSTRUCTIONS

THERMOTEK™ SELF-ADHESIVE SYSTEM - G2 + MODIFIED BITUMEN MEMBRANE OVER PLY-WOOD is approved for application over plywood roofing which have a good drainage.

A. SURFACE PREPARATION: the surface must be clean, dry and free of dust, dirt, grease, wax, or other incompatible substances that may interumpt the proper adherence of the new fluid applied:

<sup>\*</sup>Approximate measures.



- 1) Remove all loose particles on the roof by sweeping or vacuum.
- 2) For coating or repairing, the surface must be clean, dry and free of dust, dirt, grease, wax, or other incompatible substances.
- 4) Damaged/rusted panels should be replaced to match the existing ones.. New ply-wood must be clean and oil free.
- 5) Remove all asphalt-based patching and flashing materials. Do not apply solvents to remove asphalt-based materials. Remove asphalt coating with scraping or brushing.
- 6) Remove all silicone caulks and sealants. Acrylic coatings, primers and flashing grade products will not bond to silicone caulks, sealants and coatings.
- 7) Ply-wood sheathing must be exterior grade, minimum 4 ply, and not less than 15/32 inch (12 mm) thick.
- 8) Preservatives or fire retardants used to treat the decking shall be compatible with all roofing materials.
- 9) The deck shall be installed over joists that are spaced 24 inches (610 mm) o.c. or less.
- 10) The deck shall be installed in order the four sides of each panel bear on and are secured to joist and cross blocking. "H" clips are not acceptable.
- 11) Panels must be installed with a 1/8 inch to 1/4 inch (3 mm to 6 mm) gap between panels and must match vertically at joints to within 1/8 inch (3mm).
- 12) Light metal wall ties or other structural metal exposed on top of the wood deck must be covered with one ply of a heavy roofing sheet, such as Stratavent Eliminator Nailable Base Sheet, extending 2 inches to 6 inches (51 mm to 152 mm) beyond the metal in all directions. Nail in place before applying the base ply.
- 13) Tape and staple fastening systems may be used on wood decks when they comply with local building codes.
- 14) Attach an acceptable base sheet through flat metal caps or use nails with attached 1 inch (25 mm) square or round metal caps that have a minimum withdrawal resistance of 40 pounds each (178 N).
- 15) Remove and replace deteriorated pipe boots and other flexible flashing materials.
- 16) All necessary repairs to the existing roof shall be made according to NRCA (National Roofing Contractors Association) guidelines.
- 17) The substrate to which the THERMOTEK™ roof system will be installed must:
  - Be smooth, flat and clean.
  - Be free of foreign materials that could damage the system.
  - Be kept dry and roofed promptly after installation.
- B. SUBSTRATE CONDITIONS: the roofing contractor is responsible to ensure that the substrate is acceptable or the THERMOTEK™ roof system.
  - 1) THERMOTEK™ Technical representative must present to the owner a completed inspection form verifying the substrate condition and any noted defects not specifically addressed in regard to this installation.
  - 2) The surface shall be free from dirt,loose adhered granules, oil, debris and moisture, it shall be in stable condition. Any work on the area to receive this application shall be completed prior to installation.
  - 3) Prior starting coating or restoring the roof, the applicator shall complete the substrate inspection. The architect, owner and applicator must agree that the surface is in acceptable condition. After this, the THERMOTEK™ Technical Representative will begin the work.

#### C. APPLICATION INSTRUCTIONS:

- 1) G2 FIBERGLASS BASE SHEET APPLICATION: apply G2 FIBERGLASS BASE SHEET by using nails to attach it to the surface. The nails must by 1 inch (25mm), square or round metal caps, the number of nails varies from state to state, please refer the proper building code to handle out. The coverage rate<sub>1</sub> for G2 FIBERGLASS BASE SHEET is 2.7 sq ft (theoretical coverage).
  - 2) CRITICAL POINTS: review all critical points over the surface and repair them with THERMOTEK™ DURAMASTIC and THERMOTEK™ SELF ADHESIVE POLYESTER 2.0 BASE SHEET.
  - 3) THERMOTEK™ SELF ADHESIVE POLYESTER GRANULATED application. Apply THERMOTEK™ SELF ADHESIVE POLYESTER GRANULATED. The coverage rate for THERMOTEK™ SELF ADHESIVE POLYESTER GRANULATED is a 0.89 SQ (theoretical coverage).

<sup>1</sup>COVERAGE RATE: the texture and porosity of the existing roof may affect the coverage rate.



- 4) THERMOTEK™ ACRYLIC ELASTOMERIC COATING APPLICATION (OPTIONAL): for a REFLECTIVE FINISH (according TITLE 24 COMPLIANCE) apply THERMOTEK™ ACRYLIC ELASTOMERIC COATING over the entire surface. The coverage rate for THERMOTEK™ ACRYLIC ELASTOMERIC COATING will be 2.0 gallons per 100 square feet, two coats of 1.00 gallon per 100 square feet .
- 5) Finally, the applicator shall repair and/or replace any defective work found at the end of the job, before any warranties will be issued.

Note: Drying time depends on weather conditions such as temperature, humidity and air movements. The above drying times assume good weather (70°F daytime temperature) and NO RAIN. Conditions of lower temperature and rain will require a longer period for drying. The coverages contained herein are theoretical and these may vary depending on the surface roughness and the weather at the time of application. Existing foam and/or insulation roofs with extensive delamination or blistering of the foam, APP and/or the coating system, major wet areas, saturated foam, etc., will require total removal and possible replacement as per local building codes. When situations are questionable, Thermotek™ Technical Representative shall be contacted for recommendations. In all cases of prospective re-coats or initial 1st coat applications should be verified as to moisture content by survey, i.e. infra-red, in conjunction with core cuts and moisture readings. If moisture is present, the roof must be allowed to dry completely before proceeding the coating application.

#### PART 3 - WARRANTY

#### 3.1 WARRANTY

Please read our THERMOTEK™ PRODUCT LIMITED WARRANTY₁ to verify our available warranty periods.

**NOTE**: To maintain an optimal performance of the roof system, the owner must recoat the surface with the THERMOTEK™ ACRYLIC ELASTOMERIC COATING used in the system at a rate of 1.5 gal/SQ, after the first 10 years, and then, every 5. For additional warranty questions please contact THERMOTEK™ Technical and Warranty Services department.

#### PART 4 - CARE AND MAINTENANCE

### **4.1 CARE AND MAINTENANCE PROGRAM**

In order to ensure that your THERMOTEK<sup>TM</sup> Roofing Products will continue performing to its fullest, you should follow, implement and satisfy this THERMOTEK<sup>TM</sup> Care and Maintenance Program<sub>2</sub>.

- A. Maintain a file for all records relating to your roof, including the THERMOTEK™ Roofing Products agreements, reports, invoices, repair and maintenance bills, original drawings and specifications, etc.
- B. Inspect the roof and coating at least twice each year, preferably in spring and fall. The most common areas of damage or distress are drainage points, penetrations, perimeter flashings and traffic areas.
- C. The surface should always be clean and white. Pressure wash the coating as needed (at least once every 12 months) in order to remove all dirt and debris off the surface. Use THERMOTEK™ WASH and clean water with an appropriate pressure washing equipment (1500 psi − 1 ft away), do not use anything but clean water unless THERMOTEK™ Roofing Products (in such case, use only approved wash products).
- D. Inspect for damage after severe weather conditions, such as hailstorms, heavy rains, high winds, acts of God, etc.
- E. Arrange the prompt and necessary repairs to correct non-guaranteed conditions affecting the roof surface. Repairs to the surface must be promptly performed with THERMOTEK™ Roofing Products, approved contractors with approved products, and repair methods that are consistent with the type and quality of the warranted coating, in order that such repairs will last as long as the THERMOTEK™ Roofing Products.
- F. Regularly remove any debris, such as leaves, branches, dirt, rocks, bottles, rubbish... that may accumulate on the roof surface. Clean rain gutters, downspouts, scuppers, and surrounding roof areas ensure proper drainage.
- G. Examine all metal flashings, counter flashings, expansion joints and pitch pockets for repairing: rust, detachment, deteriorated sealant, and any damage. If it is necessary, reattach loose metalwork, replace sealant and paint rusted areas.

LIMITED WARRANTY - We as THERMOTEK GROUP guarantee that since our products are shipped from the production plant they will be free of manufacturing defects; all the recommendations contained herein follow tests we consider as reliable and are subject to change without prior notice. THERMOTEK GROUP does not assume any responsibility for coverage, performance on injuries resulting from storage, handling or use of our products. Liability, if any, is limited to product replacement, to the terms stated within the executed warranty.

<sup>2</sup>THERMOTEK™ CARE AND MAINTENANCE PROGRAM - is intended to address conditions commonly found on buildings (other conditions that require special maintenance considerations may exist). It is the responsibility of the building owner ensuring that the care and maintenance program used for his particular building is adequate, given that building's specific condition.



- H. Examine masonry walls and copings for cracks, bad mortar joints, deteriorated sealant, loose masonry/coping stones, and indications of bad water absorption. Repair all such conditions to prevent water filtration.
- I. Examine rooftop equipment such as air conditioners, ductwork, gooseneck vents, powered ventilators, evaporative coolers, antennas, equipment screens, skylights, satellite dishes, etc. For the excessive movement, spillage of coolant, condensation, oil, grease, water/liquid release, etc. Damage to sheet metal cabinets and rubber or fabric gaskets may allow water filtration. Employ, keep and maintain drainage systems for release of water from rooftop equipment to avoid surface water buildup. Keep all roof top equipment in good conditions.
- J. Inspect with frequency for any cracks, blistering, or flaking. Contact a THERMOTEK™ Roofing Products representative for repairing. Any such cracks, blistering or flaking must be recoat/patch with approved THERMOTEK™ products.
- K. Minimize rooftop traffic. Establish paths which confine roof traffic to designated areas only. Service personnel should take care to avoid dropping tools, equipment, parts, etc. on the roof surface; also they should not make any penetrations or repairs to the coating. All the work affecting the coating must be performed by an approved THERMOTEK™ Roofing Products contractor.

**END OF SECTION**