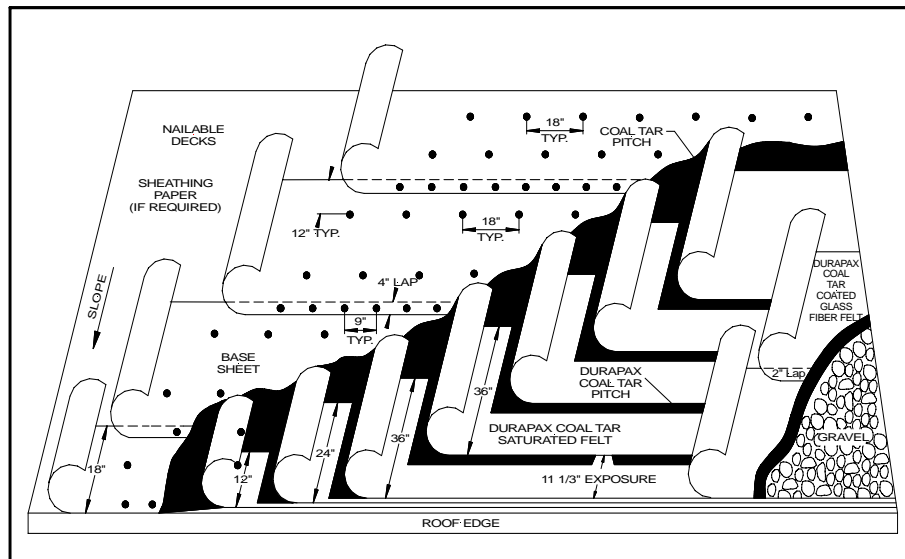


## Coal Tar Membrane System Specification No. RP-60-5 (Coal Tar Organic/TC Glass Felt Combination System)



### Temperature Guidelines Coal Tar Pitch ASTM D-450, Type I

Point of Application Range (EVT)	Kettle Temperature Maximum
360 ± 25 degrees	400 degrees

Starting at the low point of the roof, install one (1) ply of Durapax organic/glass fiber base sheet (review text in italics below) in accordance with applicable requirements and good roofing practice. Side laps shall not be less than 4". End laps shall not be less than 10" and staggered.

*Organic base sheets shall be used over wood decks, while organic or glass fiber base sheets should be used over lightweight insulating concrete/gypsum decks.*

When mechanically fastening the base sheet, install approved fasteners 9" on center along the 4" side laps and stagger nail, in two (2) rows, down the center of the base sheet 9" on centers (Approximately 100 fasteners/ 100 sq. ft.)

Depending on the particular application, special fasteners and/or plates may be required.

*At no time will a base sheet, used as the first ply of the primary roofing membrane, be left exposed or used as a temporary roof.*

Over the base sheet, immediately install three (3) plies of Durapax Coal Tar Saturated Organic Felt, shingle fashion, lapping each sheet 24 2/3" over the preceding sheet.

Immediately, following the application of the organic felts, install (cap) over the entire area, made of one (1) ply of Durapax TC Glass

### NAILABLE DECKS

Wood

Poured Gypsum

Precast Gypsum

Lightweight Insulating Concrete

### SLOPE

0" - 1/8" per foot (MAXIMUM)

### MATERIALS

Sheathing Paper (wood decks only)

Base Sheet (organic/glass) (1 ply)

Durapax Coal Tar Saturated Felt

(3 plies)

Durapax TC Glass Fiber Felt (1 ply)

Durapax Coal Tar Pitch

(Type I)

Aggregate Surfacing (gravel or slag)

### GENERAL REQUIREMENTS

The following recommendations and application procedures are a brief summary. They are intended to be used only as a general description of this particular assembly and

do not represent all information or requirements necessary to bid or install a roof project. Additional information is available in the Durapax Coal Tar Commercial Roofing Systems Application & Design Considerations publication. Follow the National Roofing Contractors Association guidelines, applicable building codes, insurance requirements and good roofing practice.

If UL or FM approval is required, consult UL, FM and Durapax for specific requirements.

### SURFACE PREPARATION

All substrate materials must be solid, clean, dry, meet applicable code requirements, be properly installed and suitable for use with the membrane system.

### APPLICATION OF MEMBRANE

Over the entire area install one (1) ply of sheathing paper, nailing sufficiently to hold in place (wood decks only).

Fiber Felt (coal tar coated), lapping each sheet not less than two (2) inches over the preceding sheet.

Each ply shall be set in a solid mopping of hot coal tar pitch and broomed into place.

End laps shall be no less than 10" and staggered between plies.

*The total membrane system must be completed at one time.*

All plies must be pressed (broomed) into the coal tar pitch while it is still hot to insure total adhesion. At no place shall ply touch ply.

Install 45° cant strips at the intersection of all vertical and horizontal surfaces, such as walls, equipment curbs, expansion joints, etc.. All plies must extend to the top of the cant strip but no further than two (2) inches above its top edge. Care must be taken to assure that all plies conform tightly to the cant.

At all horizontal edge details, such as at gravel stops, raised edge perimeters, vent pipes, pitch pockets, etc., an organic envelope or some other type of pitch dam must be provided to avoid pitch migrating from between the plies. *Durapax does not accept responsibility for pitch drippage.*

#### **APPLICATION OF PITCH**

Interply moppings shall be continuous and not less than an average of 20 lbs. per 100 square feet.

Whether applied by mop or mechanical spreader, the coal tar pitch must be sufficiently hot to adhere the system. It must not, however, be heated to temperatures greater than recommended. (See Temperature Guidelines)

It is extremely important that all interply moppings be as thin as practical, but continuous without

interruptions or voids. Heavy moppings can contribute to roof slippage on sloped roof designs. *Durapax will not be responsible for membrane slippage.*

Recommended bitumen application rates are offered only as a guide and can vary depending upon many factors. Actual experience by the contractor must be considered when estimating project requirements.

#### **FLASHING INSTALLATION**

Prior to installing the aggregate surface, all flashings must be complete. Install composition base Flashing in accordance with the applicable specifications. Appropriate Flashing specifications and details can be found at [www.durapax.com](http://www.durapax.com) or by contacting Durapax directly at 610-579-9075.

#### **AGGREGATE SURFACING**

Over the entire membrane surface, apply a uniform coating of hot coal tar pitch at an average rate of not less than 70 lbs. per 100 sq. ft. While the coal tar is still hot, embed 400 lbs. of gravel or 300 lbs. of slag per 100 sq. ft.

*It is recommended that the aggregate surfacing be installed immediately following the application of the membrane, however, the glass felt surface may be left unsurfaced for up to 14 days.*

Before top pouring the membrane with pitch and embedding the aggregate, the roof membrane must be inspected to determine that all plies are lying smooth and foreign materials have been removed.

To obtain the desired top coating of pitch, it shall be applied either by pouring or through a mechanical applicator designed and regulated for this purpose. *Durapax will not be responsible for migration of the*

*top pour and aggregate surfacing.*

The aggregate used shall be reasonably clean, dry, and meet ASTM D-1863 standards. The aggregate must be spread into the hot top pour while it is still hot enough to achieve the required bonding.

#### **MATERIAL PROTECTION**

All materials shall be kept clean and dry prior to their installation. When stored outside or on a job site, materials shall be kept off the ground and adequately covered with tarpaulins.

#### **OTHER**

Florida Roofing Application Standard (RAS) NO. 150 must be followed, at a minimum, for all projects in Florida.