## Full Facility Roof Report

## Prepared for:

Mr. Adam LaDuke
Kings Welding Works 10111 Capital Road Oak Park, Michigan 48237

## Prepared by:

Jacqueline Walters
LaDuke Roofing and Sheet Metal
13000 Northend Ave
Oak Park Michigan 48237
(248) 414-6600
(248) 414-6604


## Kings Welding Works

Facility: Administration Office 10111 Capital Road Oak Park Michigan 48237 USA

Contact Name: Mr. Adam LaDuke
Contact Telephone: (248) 542-1632 Ext:


Contact Fax: (248) 542-8166
Date of Last Inspection: Sep 01, 2006
Type of building: Commercial
Type of Neighborhood: Commerical


Roof Section List

| Photo | Section I Name / Year Installed | Size I <br> Height | Roof Type | $\begin{aligned} & \text { Condition } \\ & \text { Index/ } \\ & \text { *RCII/ } \\ & \text { ASLR(Yrs) } \end{aligned}$ | Estimated Replacement Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1$ | ADMIN Administration Roof System 1998 | $\begin{gathered} \text { 2,500 sq. ft. } \\ 12 \mathrm{ft} . \end{gathered}$ | Modified - Hot Applied | $\begin{aligned} & \hline \text { Good } \\ & \text { (Yrs) } \end{aligned}$ | \$17,500.00 |
|  |  |  |  |  | 2,500 \$17,500.00 |

*RCI Rating 0-100 where 100 is excellent

## Recommendation Summary

| Section ID | Budget <br> Year | Activity Type | Action Item ? | Allocation | Urgency | Budget Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ADMIN | 2006 | Inspection | No | Not Applicable | Not Known | \$0 |
| ADMIN | 2006 | Repair | No | Not Applicable | Not Known | \$0 |
| ADMIN | 2006 | Inspection/Repair | Yes | Capital | Moderate | \$0 |
| ADMIN | 2008 | Inspection | Yes | Capital | High | \$0 |
| ADMIN | 2010 | Inspection | Yes | Capital | High | \$0 |
| ADMIN | 2012 | Inspection | Yes | Capital | High | \$0 |
|  |  |  |  |  | $\mathbf{\$ 0}$ |  |


| Warranties |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Section <br> ID | Issue Date | Expiry Date | Warranty Type | Issued By |  |
| ADMIN | May 01, 1998 | May 01, 2003 | 2 Year Contractors <br> Workmanship Warranty | Roofing Contractor |  |
| ADMIN | May 01, 1998 | May 01, 2008 | 10 Year Manufacturers <br> Warranty | Firestone Roofing Systems |  |

Roof Name: Administration Roof System
Roof Size: 2,500 sq. ft.
Est. replacement Cost: \$17,500.00
Existing System Type: Modified - Hot Applied
Year Installed: 1998
Assessed Service Life
Remaining (Years) :


Height: 12 Ft .
Slope: Moderate
Interior Sensitivity: Normal
Drainage: Adequate
Currently Leaking? No
History of Leaking? No
Drainage and Leak The roof drains via interior roof sumps.
Details:
No leaks were reported at the time of inspection.

## Warranties

| Issue Date | Expiry Date | Warranty Type | Issued By |
| :---: | :---: | :---: | :---: |
| May 01, 1998 | May 01, 2003 | 2 Year Contractors Workmanship <br> Warranty | Roofing Contractor |
| May 01, 1998 | May 01, 2008 | 10 Year Manufacturers Warranty | Firestone Roofing Systems |


| Warranty Compliance Plan |  |  |  |
| :---: | :---: | :---: | :---: |
| Issue Date | Expiry Date | Warranty Type |  |
| May 01, 1998 | May 01, 2008 | 10 Year Manufacturers Warranty |  |
| Inspection Date | Activity Type | Allocation | Actual / Budget Cost |
| Sep 01, 2006 | Inspection | Not Applicable | \$0 |
| Sep 02, 2006 | Repair | Not Applicable | \$0 |
|  |  |  | \$0 |
| Issue Date | Expiry Date | Warranty Type |  |
| May 01, 1998 | May 01, 2003 | 2 Year Contractors Workmanship Warranty |  |
| Inspection Date | Activity Type | Allocation | Actual / Budget Cost |


| Work History Details |  |  |  |  |
| :---: | :--- | :--- | :--- | ---: |
| Date | Activity type | Contractor / Inspector | Allocation | Actual Cost |
| Sep 02, 2006 | Repair | LaDuke Roofing \& Sheet <br> Metal | Not Applicable | $\$ 0$ |

Repaired all membrane defects including the following:
Cut and repaired membrane blister with new granulated cap sheet
Readhered and terminated open base flashing with termination bar and masonry fasteners
Swept, bagged, and removed all miscellaneous debris
Refilled low pitch pan with new pourable sealer
Trimmed, bagged, and removed all overgrowth from adjacent tree
All field reports have been filed and submitted for invoicing.

| Sep 01, 2006 | Inspection | LaDuke Roofing \& Sheet <br> Metal | Not Applicable |
| :--- | :--- | :--- | :--- |

Performed standard preventative maintenance survey.

| Existing Roof System Construction |  |  |
| :---: | :--- | :---: |
| Layer Type | Description | Method Of Attachment |
| Membrane | 2 Ply Modified Roofing | Hot asphalt |
| Insulation | 1" Perlite | Hot asphalt |
| Insulation | 2" Polyisocyanurate | Mechanically attached |
| Deck | Metal | Mechanically attached |

## Overall Core Condition

The core assessment for this area revealed that there is one roof system on this building composed of a 2 ply modified roofing membrane over 2 lc of insulation, secured to a metal roof deck. This system has an R-Value of roughly 18-20.

## Membrane Defects - Outstanding

| Type Of Defect | Severity | Quantity |
| :--- | :--- | :---: |
| Pitch Pan Fill Material Is Low | Medium | 1 |

Pitch pans should be completely filled with pourable sealer to maintain weathertightness around the penetration. As this material degrades over time, it will lose it's effectiveness against the weather and in this case, the pitch pan will also hold water. This pitch pan should be re-filled with the appropriate material.


Large blisters in a roof membrane can cause seams or laps to open prematurely and/or stretching until eventually the membrane breaks open. Blisters should be repaired according to manufacturer standards.


## Membrane Defects - Outstanding Continued...

| Type Of Defect | Severity | Quantity |
| :--- | :--- | :---: |
| Miscellaneous Debris | Low | 1 |

Debris can damage the roof membrane by wearing away the protective surface granules or by retaining moisture. In some cases, debris can scratch or even tear the membrane during harsh weather conditions. All roof systems should be kept clean of any debris.


| Vegetation/Overgrowth | Low | 1 |
| :--- | :--- | :--- |

Overgrown tree branches can damage a roofing membrane as they move during windy weather conditions. Leaves from the trees can also clog roof sumps causing damage to the roof assembly or worse, causing interior damage to walls or ceilings as well. All vegetation should be trimmed back from the roof system.


## Membrane Defects - Outstanding Continued...

| Type Of Defect | Severity | Quantity |
| :--- | :--- | :---: |
| Loose Base Flashing | High | 1 |

Base flashing ends or laps should be firmly adhered to provide a weathertight roof system. This area in particular, should be readhered and terminated following proper manufacturer standards.



| Roof Top Details Continued... |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Photos | Detail Type | Description | Flashing <br> Membrane | Flashing Metal |  |  |
|  | Projection | Soil stack | Target | Lead |  |  |
|  | The soil stack has been flashed with a lead pipe boot and a 2 ply white modified flashing <br> target. Appears to be in good condition. |  |  |  |  |  |

## Overall Roof Inspection Assessments

| Date | Inspection Type | Inspecting Company | Inspector |
| :---: | :---: | :---: | :---: |
| Sep 01, 2006 | Preventive Maintenance <br> Inspection | LaDuke Roofing \& Sheet Metal | Jacqueline Walters |

The Kings Welding Works : Administration roof area was evaluated by visual inspection to determine the overall state of the existing roof system. The roof appeared to be in good condition at the time of inspection. There are a few repairable defects that can be corrected and they are as follows:

Repair all membrane blisters
Repair loose base flashing
Remove miscellaneous debris
Refill low pitch pan
Trim and remove all overgrowth
These items should be considered part of a preventative maintenance measure to help maintain weathertight conditions on this part of the facility. We recommend that this roof area receive biannual preventative maintenance inspections to expend the maximum amount of life of this roof system.

| Recommendations Details |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | ---: | :---: |
| Budget <br> Year | Activity Type | Action <br> Item ? | Allocation | Urgency | Quotation \$ |  |
| 2006 | Inspection | No | Not Applicable | Not Known | $\$ 0$ |  |

Provided a detailed activity report on the Administration building roof. Indicated membrane defect areas will be scheduled for repair.

| 2006 | Repair | No | Not Applicable | Not Known | \$0 |
| :---: | :---: | :---: | :---: | :---: | ---: |

All membrane defects recommended for repair have been completed and all field reports have been submitted for invoicing.

| 2006 | Inspection/Repair | Yes | Capital | Moderate | $\$ 0$ |
| :---: | :---: | :---: | :---: | :---: | ---: |
| Perform standard preventative maintenance survey and repair as necessary. |  |  |  |  |  |
| 2008 | Inspection | Yes | Capital | High | $\$ 0$ |

Perform standard preventative maintenance survey and repair as necessary.

| 2010 | Inspection | Yes | Capital | High | $\$ 0$ |
| :---: | :---: | :---: | :---: | :---: | ---: |
| Perform standard preventative maintenance survey and repair as necessary. <br> 2012$\quad$ Inspection | Yes | Capital | High | $\$ 0$ |  |

Perform standard preventative maintenance survey and repair as necessary.

## End of the Roof Section

## Administration Roof System Roof - ADMIN

