

# CLASS TWO / DIVISION TWO

hazloc explosion-proof LED lighting information.



Solas Ray HazLoc Cut Sheets Identify Fixtures Class / Division.



**A Hazardous Location Requires Three Things:**

1. There must be Fuel to burn.
2. There must be Air to supply oxygen.
3. There must be Heat to start and continue the combustion process.

## Combustible Dusts

1. Combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures, and dust accumulations will normally be insufficient to interfere with the normal operation of electric equipment or other apparatus, but combustible dust may be in suspension in the air as a result of infrequent malfunctioning of handling or processing equipment.
2. Resulting combustible dust accumulations on, in or in the vicinity of the electric equipment may be sufficient to interfere with the safe dissipation of heat from electric equipment or may be ignitable by abnormal operation or failure of electric equipment.

### COMBUSTIBLE DUST

#### Volatility Temperature Chart

| Dust Type<br>by<br>Volatility | Typical<br>Self Ignition Temperature |               |
|-------------------------------|--------------------------------------|---------------|
|                               | Cloud                                | Layer         |
| Lignite                       | 380°C / 716°F                        | 225°C / 437°F |
| Lead                          | 460°C / 860°F                        | 240°C / 464°F |
| Cellulose                     | 490°C / 914°F                        | 430°C / 806°F |
| Flour                         | 490°C / 914°F                        | 430°C / 806°F |
| Cocoa                         | 500°C / 932°F                        | 200°C / 392°F |
| Polyacrylonitrile             | 540°C / 1,004°F                      | 400°C / 752°F |
| Soya Meal                     | 540°C / 1,004°F                      | 340°C / 644°F |
| Zinc                          | 570°C / 1,058°F                      | 440°C / 824°F |

## Class 2 Groups

| Group E   | Group F  | Group G   |
|---|--|---|
| <ul style="list-style-type: none"> <li>• Aluminum</li> <li>• Magnesium</li> <li>• Commercial Alloys</li> <li>• Combustible Metal Dusts</li> </ul> | <ul style="list-style-type: none"> <li>• Coal</li> <li>• Carbon Black</li> <li>• Charcoal</li> <li>• Coke Dusts</li> <li>• Combustible Carbonaceous Dusts</li> </ul> | <ul style="list-style-type: none"> <li>• Flour</li> <li>• Grain</li> <li>• Wood</li> <li>• Plastic</li> <li>• Chemicals</li> <li>• Other Combustible Dusts</li> </ul> |

### T - RATING CHART

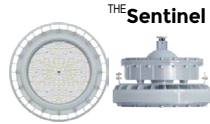
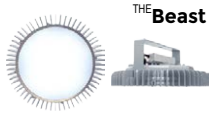
| T-CODES<br>NEC 505 | T-CODES<br>NEC 500 | MAX Surface<br>Temperature |
|--------------------|--------------------|----------------------------|
|                    |                    |                            |
| T2                 | T2                 | 300°C / 572°F              |
|                    | T2A                | 280°C / 536°F              |
|                    | T2B                | 260°C / 500°F              |
|                    | T2C                | 230°C / 446°F              |
| T3                 | T2D                | 215°C / 419°F              |
|                    | T3                 | 200°C / 392°F              |
|                    | T3A                | 180°C / 356°F              |
|                    | T3B                | 165°C / 329°F              |
| T4                 | T3C                | 160°C / 320°F              |
|                    | T4                 | 135°C / 275°F              |
|                    | T4A                | 120°C / 248°F              |
| T5                 | T5                 | 100°C / 212°F              |
|                    | T6                 | 85°C / 185°F               |

## Class 2 Division 2 Fixtures

| ROUND<br>LED LIGHTING | FLOOD<br>LED LIGHTING | LINEAR<br>LED LIGHTING | SPECIALTY<br>LED LIGHTING | RETROFIT<br>LED LIGHTING    |
|-----------------------|-----------------------|------------------------|---------------------------|-----------------------------|
| THE <b>Beast</b>      | THE <b>Dominator</b>  | THE <b>Steward</b>     | THE <b>Curator Exit</b>   | THE <b>Guard</b> RETROFIT   |
| THE <b>mini Beast</b> | THE <b>Patroller</b>  | THE <b>Keeper</b>      | THE <b>Guide</b>          | THE <b>Monitor</b> RETROFIT |
| THE <b>Guard C</b>    |                       | THE <b>Keeper 2</b>    | THE <b>Finisher 1by</b>   |                             |
| THE <b>Monitor S</b>  |                       |                        | THE <b>Finsher 2by</b>    |                             |
| THE <b>Spotter</b>    |                       |                        |                           |                             |
| THE <b>Sentinel</b>   |                       |                        |                           |                             |
| THE <b>Chieftain</b>  |                       |                        |                           |                             |
| THE <b>Aviator</b>    |                       |                        |                           |                             |
| THE <b>Foreman</b>    |                       |                        |                           |                             |
| THE <b>Pilot</b>      |                       |                        |                           |                             |

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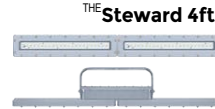
**ROUND**  
explosion-proof  
SOUND



**FLOOD**  
explosion-proof  
FLOOD



**LINEAR**  
explosion-proof  
LINEAR



**SPECIALTY**  
explosion-proof  
SPECIALTY



**RETROFIT**  
explosion-proof  
RETROFIT

