

## **Product Evaluation**

### **RE: Review of Kleen Break Model 425 Sign Post Coupler (Breakaway System)**

#### **PRODUCT**

The Kleen Break Model 425 Sign Post Coupler is manufactured by Xcessories Squared Development & Manufacturing Inc., located in Auburn, Illinois, the authorized distributor is USB Industries located in Coquitlam, British Columbia.

#### **VENDOR CLAIMS AND INFORMATION**

##### **CLAIMS**

The Kleen Break Model 425 Sign Post Coupler components are all re-usable after impact except for the shear bolt which must be replaced. The Kleen Break system allows for 360<sup>0</sup> indexing for proper sign orientation after anchoring portion is permanently set. . Product Web site: <http://www.x-sqrd.com/>

##### **DESCRIPTION**

The Kleen Break Model 425 Sign Post Coupler consists of two ductile iron components, a top half and a bottom half joined together with a 5/8" – 11 UNC shear bolt using a lock washer, flange nut and a 80 durometer rubber bushing.

##### **POTENTIAL USAGE**

The Kleen Break Model 425 Sign Post Coupler reusable feature after being impacted reduces re-installation time, replacement costs and labor.

##### **STANDARDS**

The Kleen Break Model 425 Sign Post Coupler has been crash tested as per NCHRP 350 protocol.

#### **ALBERTA TRANSPORTATION COMMENTS**

##### **EXPERIENCE**

Alberta Transportation has used breakaway ground mounted posts. I-Beam and Breakaway Ground Mounted Bases Steel I-Beam Posts are included in the typical drawing for sign installation in the Highway Guide and Information Sign Manual (TCS-A4-310 and TCS-A4-315).

##### **APPLICABLE STANDARDS**

The Alberta Transportation Specification for Breakaway Steel Sign Posts is as follows:  
Standard Specification for Highway Construction 5.18 Supply of Permanent Highway Signs, Posts and Bases and Specification 7.7, Permanent Highway Signing.

##### **RECOMMENDATIONS**

Kleen Break Model 425 Sign Post Coupler be listed as a Trial Product under Alberta Transportation Products List, Signs and Supports – Supports – Breakaway – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

#### **TRIAL PROJECTS**

Intersection of Hwy 55 and Hwy 892

Joe Filice

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