

# FIELD STUDY SMARTORK

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**Location :**            **WILSON PLAZA**  
**606 N. CARANCAHUA**  
**CORPUS CHRISTI, TX. 78476**

**October 21, 2010**

**Objective:** *To determine the amp reduction a SmarTork reel closer would have on an elevator door operator in comparison to a conventional door closer.*

**Procedure:** *Each closer was cycled four times with the highest peak amperage dropped on each and the remaining averaged .The following are the results of this test.*

Door system:    42" bipart

Door operator:  24 Volt DC Mac Door Operator with 104 board

## **Conventional Reel Closer**

**Tension Lbs in open position**

**Tension Lbs in closed position**

7.11 Lbs

6.5 Lbs

### **Peak Amps**

Operations        1) 3.42    2) 3.84    3) 3.51

Total combined Peak Amps.....    10.77

**Average .....**            **3.59**

## **SmarTork Reel Closer**

**Tension Lbs in open position**

**Tension Lbs in closed position**

5.1 Lbs

6.5

### **Peak Amps**

Operations        1) 3.27    2) 3.12    3) 3.4

Total combined Peak Amps .....    9.79

**Average .....**            **3.26**

Conventional Reel Closure Average Amps Per Cycle..... 3.59  
SmarTork Reel Closure Average Amps Per Cycle..... 3.26  
**Difference..... .33 Amps**

**Average Cycles : 2878 ( 24 hr period).**

2878 x 2 (seconds per cycle) = 5756 seconds

60 seconds x 60 minutes = 3600 seconds ( 1 hr )

**5756 / 3600 = 1.59 hrs**

**\*\*SMARTORK PROVIDES 9.2% ENERGY SAVINGS PER CYCLE OF ELEVATOR DOOR OPERATOR\*\***

**COMPLIES WITH ASME A17.1**

**COMPLIES WITHIN ASHRAE 90.1 GUIDELINES**

**Wilson Plaza is 16 stories with 4 commercial passenger elevators.**

I Kelly Dean Marshall certify all testing, results and information in this report to be accurate and held true to the best of my understanding and knowledge, as it applies to the elevator industry and its' practices.

*Kelly Dean Marshall*

*Authorized OSHA Construction Outreach Trainer # C 0039144*

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