## **ASSA ABLOY Carbon Savings Counter - Assumptions**

## Ecoflex:

Based on GreenCircle Certified energy savings, the specific product with the least amount of carbon savings in the product line was selected (Sargent Ecoflex Electrified Mortise Lock 24 V Fail Secure and 12V Fail Safe) for a conservative estimate. A 50/50 production ratio was assumed between Fail Safe and Fail Secure. The product annual sales from 2012 to mid-year 2014 were used to determine the cumulative carbon savings by these ASSA ABLOY products. (For example, as products sold in 2012 have been reducing customers' energy and carbon for multiple years, two years of use has been taken into account.) A 24/7 application was assumed for these products. The total amount of carbon savings was calculated compared to a traditional solenoid lock. The average US eGrid from 2010 was used for the carbon factor to calculate carbon savings. Equivalent carbon savings for vehicles removed from road, gallons of gasoline, coal, landfilled waste, and trees are based on the US EPA Greenhouse Gas equivalences calculator.

## POE:

The POE energy and carbon savings is assumed to be comparable across the POE product line with the basis analysis being the GreenCircle certified energy savings of the Fail Secure and Fail Safe electrified mortise locks to the S1 and P1 systems. The specific product with the least amount of carbon savings in the product line was selected (S1 POE to Fail Secure and P1 POE to Fail Secure). The sales of POE from 2012 to mid-2014 were used for cumulative carbon savings by these ASSA ABLOY products. (For example, as products sold in 2012 have been reducing customers' energy and carbon for multiple years, two years of use has been taken into account.) A 24/7 application was assumed for these products. the total amount of carbon savings was calculated compared to a traditional system. The average US eGrid from 2010 was used for the carbon factor to calculate carbon savings. Equivalent carbon savings for vehicles removed from road, gallons of gasoline, coal, landfilled waste, and trees are based on the US EPA Greenhouse Gas equivalences calculator.

## Trio-E:

Based on a case study at the Wolf Ridge Environmental Learning Center, it was found that Trio-E doors when implemented in colder climate zones can save 947 lbs CO<sub>2</sub> per year per door! Based on sales data in Climate zones 6 and 7 from 2012 through 2014, the amount of carbon saved from Trio-E doors was calculated. (For example, as products sold in 2012 have been reducing customers' energy and carbon for multiple years, two years of use has been taken into account.) Equivalent carbon savings for vehicles removed from road, gallons of gasoline, coal, landfilled waste, and trees are based on the US EPA Greenhouse Gas equivalences calculator.