



## Contactless IC Card Durability Testing

(April 2006) – Independent laboratory test results reveal that printed **Teslin** Sheet contactless IC cards withstand flexing and IC mechanical stresses better than printed PVC cards.

### Dynamic Bending

| Product                   | Length Flex | Width Flex | Response                              |
|---------------------------|-------------|------------|---------------------------------------|
| PVC cards                 | 2 cm        | 1 cm       | Fracture after 19000-26000 cycles     |
| <b>Teslin</b> sheet cards | 2 cm        | 1 cm       | <b>No Fracture after 40000 cycles</b> |

### 3-Wheel Test (ISO/IEC 10373-3:2001 – 100 cycles, 30 cycles/minute)

| Product                   | Center Wheel Load | Contactless Reader Response After Load Cycling? |
|---------------------------|-------------------|-------------------------------------------------|
| PVC cards                 | 8N                | Yes                                             |
| PVC cards                 | 15N               | No                                              |
| <b>Teslin</b> sheet cards | 8N                | Yes                                             |
| <b>Teslin</b> sheet cards | 15N               | <b>Yes</b>                                      |
| <b>Teslin</b> sheet cards | 18N               | <b>Yes</b>                                      |

### 3-Roller Test

| Product                   | Top Roller Load | Contactless Reader Response After 10 Passes? |
|---------------------------|-----------------|----------------------------------------------|
| PVC cards                 | 180N            | No                                           |
| <b>Teslin</b> sheet cards | 180N            | <b>Yes</b>                                   |