



## ESSL IF-Scale Tornado Summary Tornado from Ervillers to Arleux, France (also known as “Palluel-Tornado”)

Strongest damage concentration: Écourt-Saint-Quentin  
Event date and time: 24 Jun. 1967, 19:35 UTC  
Maximum intensity: IF5

**Several massive brick masonry buildings were completely destroyed. Some of those buildings originally had thick walls of more than 40 or even more than 80 cm width.**

Example 1: Écourt-Saint-Quentin



### **Example 1:**

The most prominent damage was found at a farm/factory site close to the village of Écourt-Saint-Quentin. There, almost all walls were razed to the ground. The remaining wall fragments of a brick masonry mass wall reveal a wall thickness of 90 cm (with estimates ranging from 80 to 100 cm).

**IF-Scale damage indicator (DI):** BS (building, structural elements)

**IF-Scale sturdiness class:** E or F

**IF-Scale Degree of Damage (DoD):** 2

(Near complete destruction, more than 2/3)

**Result for sturdiness class E:** IF5

**Result for sturdiness class F:** IF5

### **Example 2:**

Agricultural complex, some massive brick walls (thicker than 40 cm, see center of photo).

**DI:** BS E or F (depending on geometry, thickness)

**DoD:** 1B or 2

**Possible IF-Scale results:** E/1B: IF4

E/2 and F/1B: both IF5

F/2: IF5

Note: From this photo alone it is unclear how the tractor arrived on top of a pile of rubble in the foreground. Was it airborne?

### **Example 3:**

Several destroyed buildings, brick masonry. Depending on strength,

**DI:** BS D or E

**DoD:** 2

**Possible IF-Scale results:** D/2: ≥IF4

E/2: IF5



Example 2: unknown place



Example 3: Écourt-Saint-Quentin

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Number of analyzed historical damage photos: 14  
Additional information analyzed: 6 pieces of written damage accounts.  
Examples for sources of uncertainty for the ratings: Unknown brick and mortar quality, unknown effect of clean-up works.

The International Fujita Scale (IF-Scale) documentation is available here:  
<https://www.essl.org/cms/research-projects/international-fujita-scale/>