



SFPE Standards-Making Committee on Calculating Fire Exposures
Database Working Group
Meeting Report – March 2, 2017

Present: Sean Hunt (Working Group Leader), Jason Smart, Ulf Wickström and Chris Jelenewicz (Staff)

The following was discussed:

1. Open Items from 12/14/16 Working Group Meeting

- **Additional test data:**
 - a. Fire Code Reform Center (Beyler) – uploaded to SharePoint
 - b. Croce Data (Beyler) – uploaded to SharePoint
 - c. OZONE fire model data – not submitted yet
- **Reference list (Hunt)** – 28 new references were added to the reference list.
- **Additional literature (journal articles, technical reports) issued since last database compilation (Hunt)** – Sean has uploaded 20 pages of reference material.
- **New Data**-- Craig found several new references that may have data.
- **PT Data** -- Ulf was asked to look for reports that collect test data where plate thermometers and conventional thermocouples are used in same test.

2. Next Steps

- **Screening process** -- Those present at the meeting agreed on the following culling/screening criteria:
 - a. Low peak temperature (under 600°C)
 - b. Forced ventilation
 - c. Excessively small scale (approximately $< 10 \text{ m}^3$) – for existing data and new data slightly $< 10 \text{ m}^3$, the working group will review and determine if relevant.
 - d. Unknown boundary construction, openings and other nominal inputs

- e. Change in ventilation occurred during test
- f. Test was conducted in a furnace
- g. Lack of data (no temperatures reported)
- h. Multiple compartments

CJ will send an email ballot to the working group to obtain final approval on the above criteria.

- **Initial discussion on developing a hierarchy structure** – After the data is screened, the working group will determine the quality of this data. The data will be rated on a scale of 1 to 5 with 5 being the best available data and 1 the worst. To determine data quality, the following comparison metrics were discussed:
 - a. Completeness of the dataset
 - b. Was peak, average, temporal temperatures measured?
 - c. Location of instrumentation
 - d. Reliability of Instrumentation
 - e. Was HRR measured?
 - f. Decay period part of test?
 - g. Scale of enclosure
 - h. Construction – (e.g. steel walls)
 - i. Quality of opening (horizontal openings, large vertical openings (entire wall missing))
- 3. **Moving Forward** – the working group will finalize the screening process by an email ballot. At the next meeting it will agree on the hierarchy structure to determine the quality of data and chart a plan for reviewing the data.
- 4. **Next Meeting** – CJ will schedule the next working group meeting for April.

End of Report