

PPE Committee Evaluation Checklist

Purpose: This checklist is designed to help PPE committees consistently evaluate turnout gear and related PPE under **NFPA 1970 (1971) - 2025**. It supports objective comparison across manufacturers while keeping firefighter health, performance, and durability front-and-center. Use it during demos, spec reviews, trials, and committee discussions.

1. Certification & Compliance

- Full **NFPA 1970 (1971) - 2025** certification (not legacy 1971-2018 results)
- Current **UL-certified composite test data (2026)** provided
- Hood(s) certified to NFPA 1970 particulate blocking requirements

Notes:

2. Particulate & Chemical Exposure Reduction

- Hood blocks **≥90% of particulates (0.1–1.0 microns)**
- Hood minimum TPP **≥20 cal/cm²**
- Manufacturer clearly states **PFAS status**
- “Non-PFAS” claim supported by **<100 ppm total fluorine testing**
- Restricted Substances List (RSL) testing completed for materials

Notes:

3. Thermal Protection (TPP)

- Composite meets **minimum TPP ≥35 cal/cm²**
- Committee understands that **TPP ÷ 2 ≈ seconds to second-degree burn in flashover conditions**
- Committee reviewed design impacts (pockets, reinforcements, trim, overlaps)
- Results reflect the **updated test method** (expect lower performance vs. older data)

TPP Value(s) Reviewed:

4. Heat Stress & Breathability (THL)

- Composite meets **minimum THL ≥205 W/m²**
- THL value aligns with department activity level, climate, and call volume
- Committee understands that when comparing composites **≥20 THL units is noticeable**
- Tradeoffs between TPP and THL were discussed and understood

THL Value(s) Reviewed:

5. Evaporative Cooling (Ret)

- Composite meets **maximum Ret ≤45 Pa·m²/W**
- Committee understands **lower Ret = better sweat evaporation**
- Ret values considered when comparing lightweight or non-PFAS systems
- Physiological impact (heat strain, recovery time) discussed

Ret Value(s) Reviewed:

6. Durability & Conditioning

- Outer shell tested under **multi-environmental conditioning**
- Post-conditioning tear strength >22 lbs.** verified
- Multi-environmental conditioning performance **compared to other outer shells**

Notes:

7. Design, Fit, and Function

- Range of sizes and design cuts accommodate full department demographics
- Mobility evaluated during common fireground movements (reach, crouch, crawl)
- Reinforcements considered for both durability **and** heat stress impact
- Pocket layout, closures, and interfaces evaluated with gloves on

Notes:

8. Cleaning, Care, and Maintenance

- Manufacturer provides clear cleaning & decontamination guidance
- PPE designed to withstand repeated washing without performance loss
- Replacement parts and repair options explained
- Expected service life discussed and documented

Notes:

9. Vendor Support & Documentation

- Vendor can clearly explain TPP, THL, and Ret in firefighter friendly terms
- All claims supported with **test data** (not marketing language)
- Demo gear and trial feedback formally captured
- Warranty, lead times, and delivery schedule reviewed

Notes:

Committee Summary

Strengths Identified:

Concerns / Tradeoffs:

Recommendation:

- Advance to next evaluation phase
- Request additional data or revisions
- Do not advance



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