



**TO:** GOODMORNING.COM

**FROM:** BRAD SCHROEDER, P.ENG.

brad@tteng.ca

**DATE:** October 1st, 2024

**RE:** PHYSICAL MATTRESS TESTING

## INTRODUCTION

---

GoodMorning.com has commissioned Techtree Engineering to provide independent 3<sup>rd</sup> party testing of multiple mattresses, based on an established testing schema prescribed by GoodMorning.com.

Techtree Engineering is an independent 3<sup>rd</sup> party engineering firm headquartered in Alberta, Canada, with a presence throughout the country.

The testing procedures are described briefly below, and in greater detail in document "TT-GM-01 – AppendixB".

Sincerely,

**Techtree Engineering Ltd.**

Brad Schroeder, P.Eng.



## TESTING METHODOLOGY

a. **Reference Loads** – The equipment used to perform the tests below is as follows:

1. 105 lb Rescue Randy mannequin
2. 65 lb weighted vest
3. Accelerometer
4. 10 lb medicine ball
5. Mattress testing base
6. Levels, tape measure – not shown



*Rescue Randy, weighted vest, accelerometer, and mattress testing base (levels/tape measure not shown)*

### b. **Test Conditions**

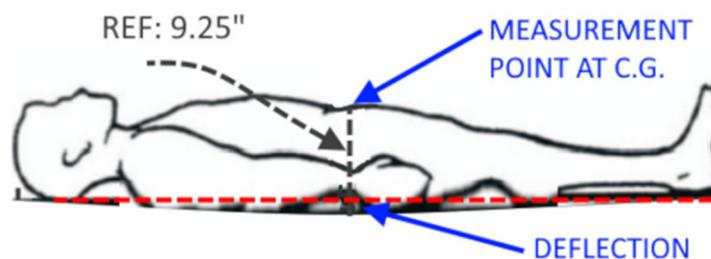
All tests were performed in offices equipped with thermostat-based temperature control, which maintains the environment within a specific range.



## PART 1 - FIRMNESS TEST:

1. **Objective:** This test is conducted to assess the mattress's level of firmness, verifying that it adheres to the established criteria for comfort and support. This serves as a foundation for comparison, evaluation, and dialogue.
2. **Overview:** This test involves measuring the mattress's resistance to pressure by applying a human equivalent load and assessing its firmness level.
3. **Procedure:** A mannequin weighing 105 lb, outfitted with a weighted vest of 65 lb, was employed to assess the mattresses' deflection levels in comparison to a baseline measurement. These deflection readings help to ascertain the mattress's firmness, with greater deflection indicating a softer mattress.
4. **Formulas and calculations**

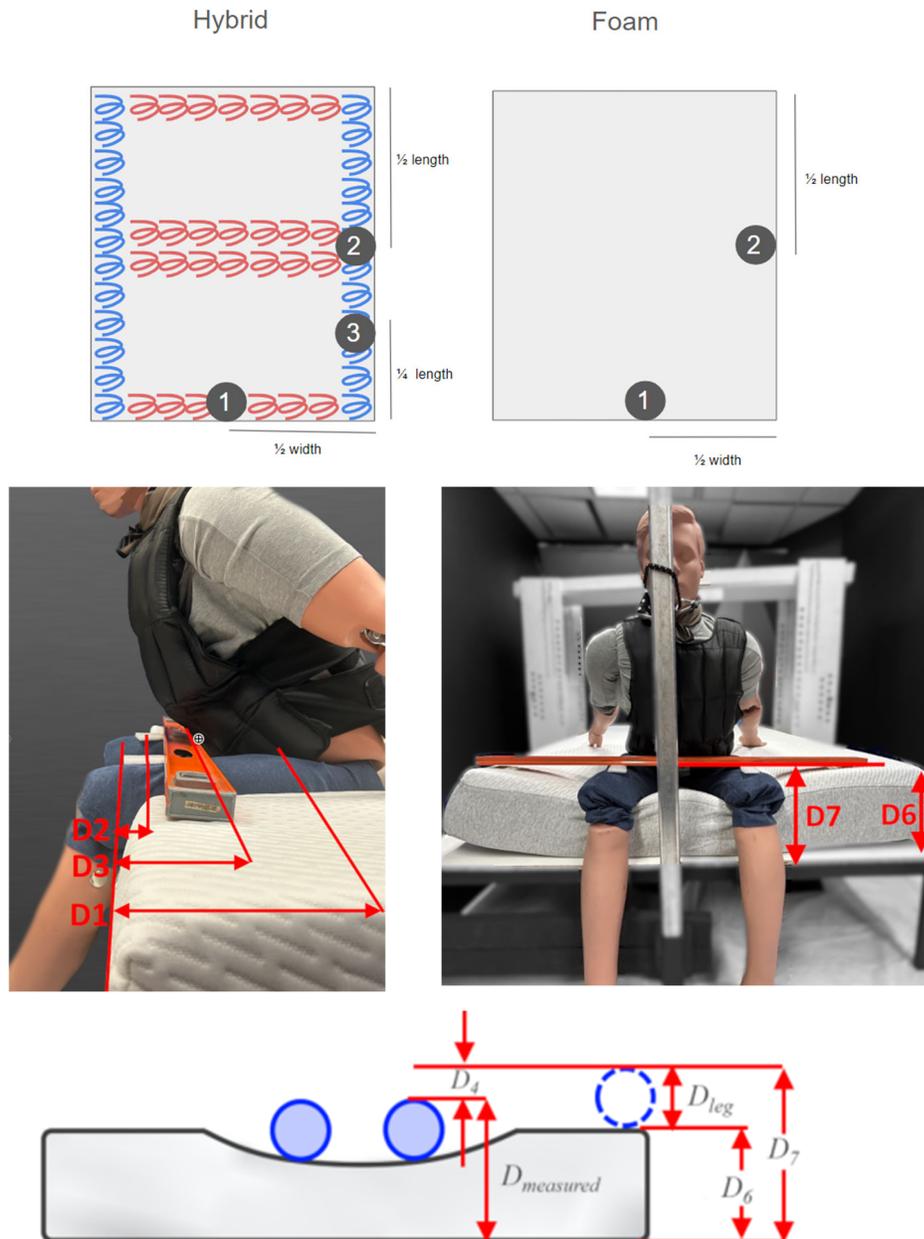
Deflection = Neutral measurement - (Deflected measurement + Mannequin thickness at the measurement point).





## PART 2 EDGE SUPPORT TEST:

- Objective:** This test aims to assess the edge of the mattress's capability to retain structural integrity and comfort when subjected to pressure. It serves as a foundation for comparison, evaluation, and discussion.
- Overview:** This test involves measuring edge deflection by applying a human-equivalent load at various points along the mattress's perimeter, tailored to the specific type of mattress (hybrid or foam). Results are categorized and scored according to mattress type.
- Procedure:** The edge support of mattresses is evaluated by situating a 105 lb mannequin at the mattress's edge, equipped with a 65 lb weighted vest, and conducting measurements from the thighs down to a predetermined reference point. Multiple measurements are systematically recorded for each mattress as outlined in the following illustrations:





#### 4. Formulas and calculations – all measurements are in inches

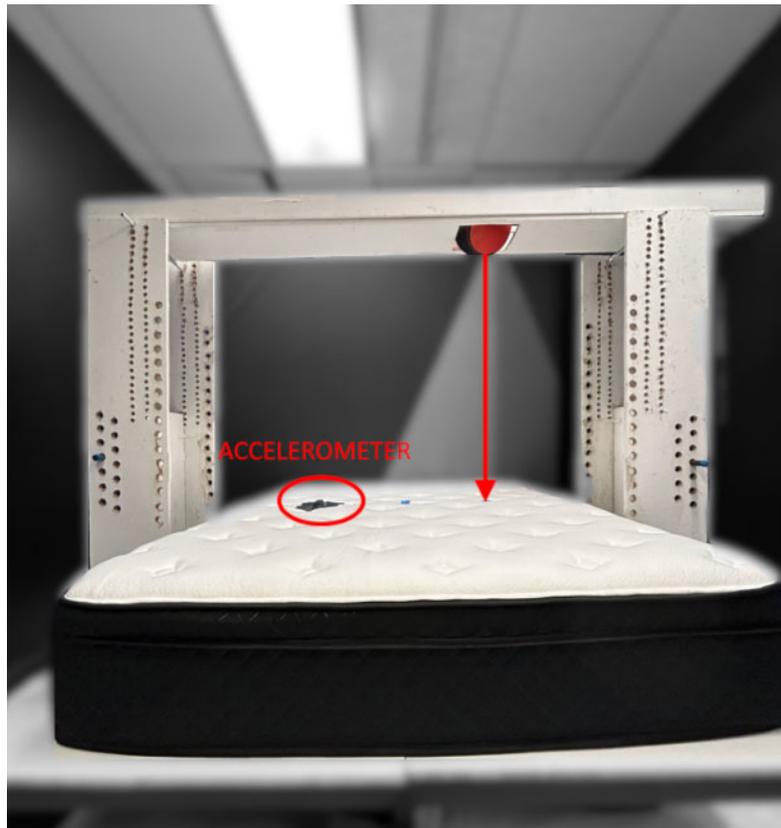
Constant values: D1=17 ; Leg thickness Dleg=5.375 at D2, Dleg=6.375 at D3

- Initial Setup and Measurements:
  - D1: Constant distance from the mattress edge to the center of mass of the mannequin.
  - D2: Horizontal reference point established by placing a level on the mannequin's knees.
  - D3: Alternate horizontal reference point, similar to D2.
  - D6: Mattress thickness.
  - D7: Distance from the top of the knees to the foundation base, indicating the height with no sinkage.
- Sinkage Measurement:
  - D measured: The distance from the top of the knees to the foundation base while the mannequin is seated, used to determine the sinkage.
- Deflection Calculations:
  - Deflection at the Knees  $D4' = D7 - D$  measured.
  - Deflection at the Thigh  $D4''$ : Uses the same formula as  $D4'$ , calculated at a different point to capture the deflection at thigh level.
- Average Deflection:
  - D4: Average deflection value, obtained by averaging the two measurements ( $D4'$  and  $D4''$ ), provides a comprehensive assessment of the mattress edge support.
- Repeat Measurements and Final Calculations:
  - Measurements are repeated at various locations across the mattress according to the mattress type.
  - The average deflection value across all test points and for each mattress type: Hybrid and Foam, is determined, offering a metric for assessing overall edge support.



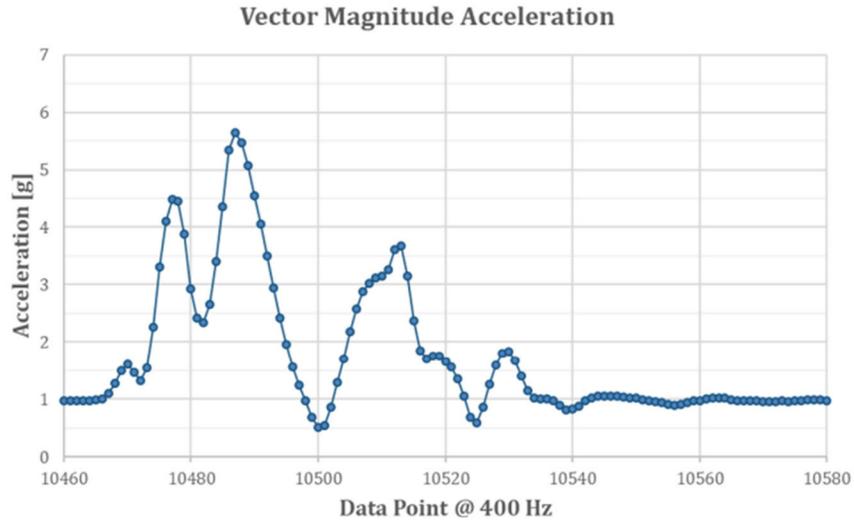
## PART 3 – MOTION ISOLATION:

- 1. Objective:** This test aims to assess how much motion transfer is experienced on one side of the mattress from movement on the other.
- 2. Overview:** This test involves repeated drops of a medicine ball at a measured distance away from an accelerometer.
- 3. Procedure:** The motion isolation of mattresses is evaluated by dropping a medicine ball on a mattress 20 times, and recording the accelerations experienced by an accelerometer. The acceleration is three-dimensional: up-down, left-right, head-toe. These three values are combined into a magnitude acceleration and averaged across the 20 test drops.





#### 4. Formulas and calculations



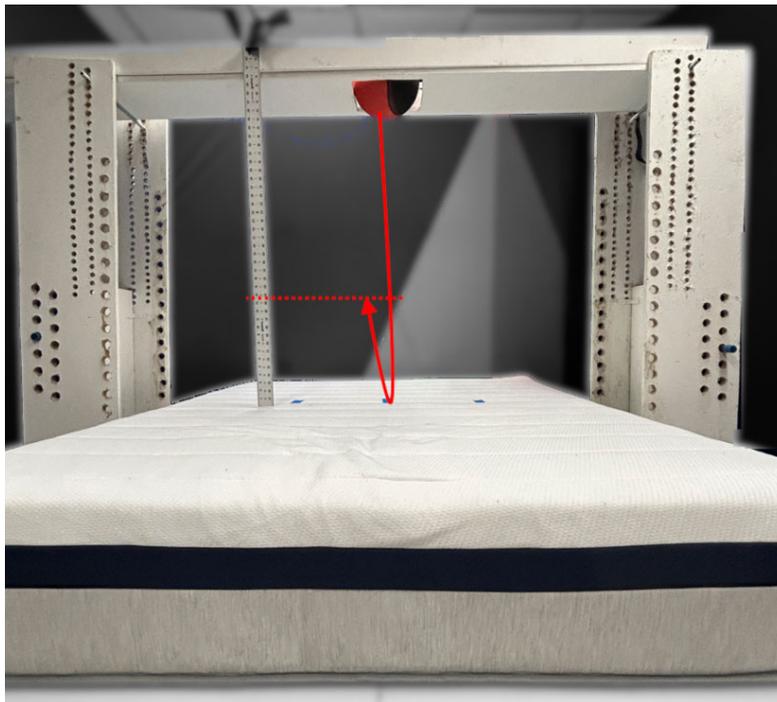
The vector magnitude of acceleration as shown above in is calculated using the expression shown below.

$$a = \sqrt{x^2 + y^2 + z^2}$$



## PART 4 – BOUNCINESS:

1. **Objective:** This test aims to assess how much rebound a mattress exhibits to quantify its bounciness.
2. **Overview:** This test involves repeated drops of a medicine ball and recording the rebound height from the mattress surface.
3. **Procedure:** Drop a 10 lb sphere (9" diameter) from a fixed distance on to the top side of each subject mattress and measure the resultant peak rebound height on its first bounce. A high resultant peak rebound height shall indicate more bounciness, while a low resultant peak height shall indicate less bounciness.





## FIRMNESS TEST RESULTS

### Mattress Firmness Measurements (in inches): Foam & Foam/Latex

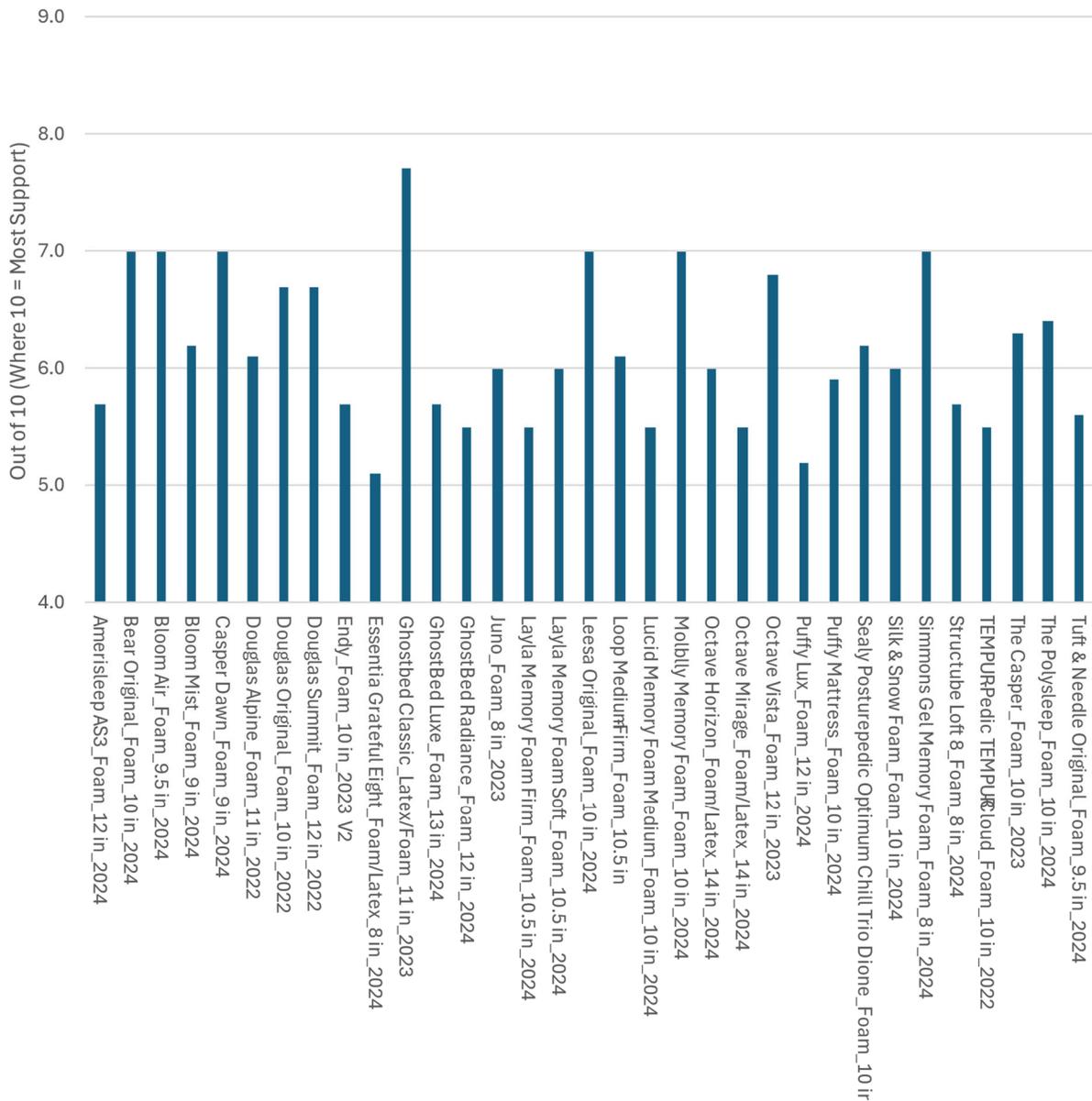
Mattress	Neutral Measurement (in)	Deflected Measurement (in)	Deflection (in)	Out of 10
Amerisleep AS3_Foam_12 in_2024	39.0	30.3	3.0	5.7
Bear Original_Foam_10 in_2024	41.5	31.5	1.8	7.0
Bloom Air_Foam_9.5 in_2024	41.0	31.0	1.8	7.0
Bloom Mist_Foam_9 in_2024	42.5	33.3	2.5	6.2
Casper Dawn_Foam_9 in_2024	42.0	32.0	1.8	7.0
Douglas Alpine_Foam_11 in_2022	32.5	23.4	2.6	6.1
Douglas Original_Foam_10 in_2022	33.8	24.0	2.0	6.7
Douglas Summit_Foam_12 in_2022	31.8	22.0	2.0	6.7
Endy_Foam_10 in_2023 V2	33.5	24.8	3.0	5.7
Essentia Grateful Eight_Foam/Latex_8 in_2024	42.4	34.4	3.8	5.1
Ghostbed Classic_Latex/Foam_11 in_2023	33.5	22.8	1.0	7.7
GhostBed Luxe_Foam_13 in_2024	39.0	30.3	3.0	5.7
GhostBed Radiance_Foam_12 in_2024	37.8	29.3	3.3	5.5
Juno_Foam_8 in_2023	35.0	26.0	2.8	6.0
Layla Memory Foam Firm_Foam_10.5 in_2024	40.5	32.0	3.3	5.5
Layla Memory Foam Soft_Foam_10.5 in_2024	40.5	31.5	2.8	6.0
Leesa Original_Foam_10 in_2024	41.0	31.0	1.8	7.0
Loop Medium-Firm_Foam_10.5 in	39.8	30.6	2.6	6.1
Lucid Memory Foam Medium_Foam_10 in_2024	43.5	35.0	3.3	5.5
Molbly Memory Foam_Foam_10 in_2024	40.8	30.8	1.8	7.0
Octave Horizon_Foam/Latex_14 in_2024	30.8	21.8	2.8	6.0
Octave Mirage_Foam/Latex_14 in_2024	31.0	22.5	3.3	5.5
Octave Vista_Foam_12 in_2023	31.9	22.1	2.0	6.8
Puffy Lux_Foam_12 in_2024	40.8	32.6	3.6	5.2
Puffy Mattress_Foam_10 in_2024	40.3	31.4	2.9	5.9
Sealy Posturepedic Optimum Chill Trio Dione_Foam_10 in_2024	40.3	31.0	2.5	6.2
Silk & Snow Foam_Foam_10 in_2024	40.0	31.0	2.8	6.0
Simmons Gel Memory Foam_Foam_8 in_2024	44.5	34.5	1.8	7.0
Structube Loft 8_Foam_8 in_2024	44.3	35.5	3.0	5.7
TEMPUR-Pedic TEMPUR-Cloud_Foam_10 in_2022	33.7	25.3	3.3	5.5
The Casper_Foam_10 in_2023	33.3	23.9	2.4	6.3
The Polysleep_Foam_10 in_2024	40.5	31.0	2.3	6.4
Tuft & Needle Original_Foam_9.5 in_2024	40.5	31.9	3.1	5.6

**Mattress Firmness Measurements (in inches): Hybrid**

<b>Mattress</b>	<b>Neutral Measurement (in)</b>	<b>Deflected Measurement (in)</b>	<b>Deflection (in)</b>	<b>Out of 10</b>
Casper Atlas_Hybrid_10 in_2024	41.8	33.0	3.0	6.5
Casper Nova_Hybrid_12 in_2023	31.8	23.8	3.7	5.9
Casper Snow_Hybrid_12 in_2024	38.5	30.5	3.8	5.9
Dormeo One_Hybrid_11 in_2024	39.4	29.9	2.3	7.3
DreamCloud Premier_Hybrid_14 in_2024	40.0	30.3	2.0	7.5
Emma Hybrid Comfort_Hybrid_13 in_2024	38.4	28.4	1.8	7.8
Endy-Hybrid_Hybrid_13 in_2023	30.8	22.5	3.5	6.1
GhostBed Fusion_Hybrid_11 in_2024	40.3	31.5	3.0	6.5
Helix Midnight_Hybrid_11.5 in_2024	38.5	30.0	3.3	6.3
Hush Graph-Iced Hybrid_Hybrid_12 in_2024	41.0	32.8	3.5	6.1
IKEA Valevag_Hybrid_9.5 in_2024	40.5	31.6	2.9	6.7
Kingsdown Passions Beckingham_Hybrid_14.5 in_2024	39.5	30.0	2.3	7.3
Kingsdown Silent Partner Fairhaven_Hybrid_14 in_2022	29.4	20.8	3.1	6.4
Kingsdown Studio Acton_Hybrid_10 in_2024	40.4	31.5	2.9	6.7
Logan & Cove Choice_Hybrid_12 in_06/2024	37.0	27.9	2.6	6.9
Logan & Cove Frontier_Hybrid_13 in_2024	40.3	31.8	3.3	6.3
Logan & Cove Pinnacle_Hybrid_15 in_2024	34.6	26.5	3.6	6.0
Purple Restore Hybrid Firm_Hybrid_11.5 in_2024	40.5	31.9	3.1	6.4
Original Hamuq Hybrid_Hybrid_13 in_2024	41.0	32.0	2.8	6.8
Saatva Classic Luxury Firm_Hybrid_11.5 in_2024	40.5	32.0	3.3	6.3
Sealy Posturepedic Hollycourt_Hybrid_14.25 in_2024	37.3	29.0	3.5	6.1
Serta iComfort Hybrid_Hybrid_14 in_2024	37.5	27.8	2.0	7.5
Serta Perfect Sleeper Elite Aero_Hybrid_10.5 in_2024	42.8	32.0	1.0	8.5
Serta Perfect Sleeper Elite Percevall_Hybrid_11.5 in_2024	40.0	30.2	2.0	7.6
Silk & Snow Hybrid_Hybrid_12 in_2024	40.0	31.0	2.8	6.8
Silk & Snow Organic Firm_Hybrid_10 in_2024	40.8	31.5	2.5	7.0
Silk & Snow Organic Medium_Hybrid_Firm_12 in_2024	40.5	31.6	2.9	6.7
Silk & Snow Organic Plush_Hybrid_14 in_2024	40.5	32.4	3.6	6.0
Simba 2500_Hybrid_12 in_2024	40.0	31.8	3.5	6.1
Spa Sensations_Innerspring_8 in_2024	42.8	33.5	2.5	7.0

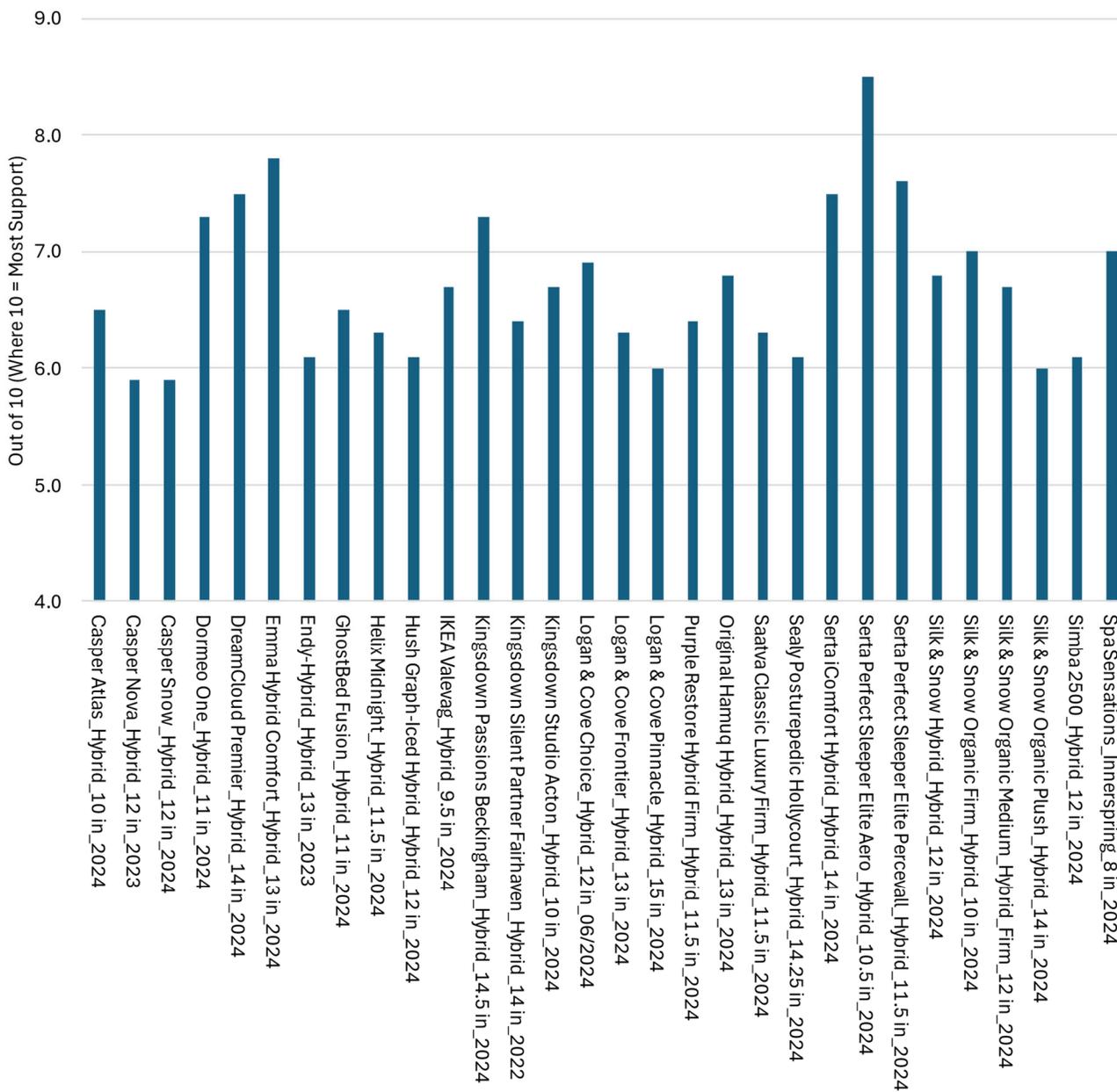


### Firmness Out of 10: Foam & Foam/Latex





### Firmness Out of 10: Hybrid





## EDGE SUPPORT TEST RESULTS

**Edge Support - Deflection Measurements (in inches): Foam & Foam/Latex**

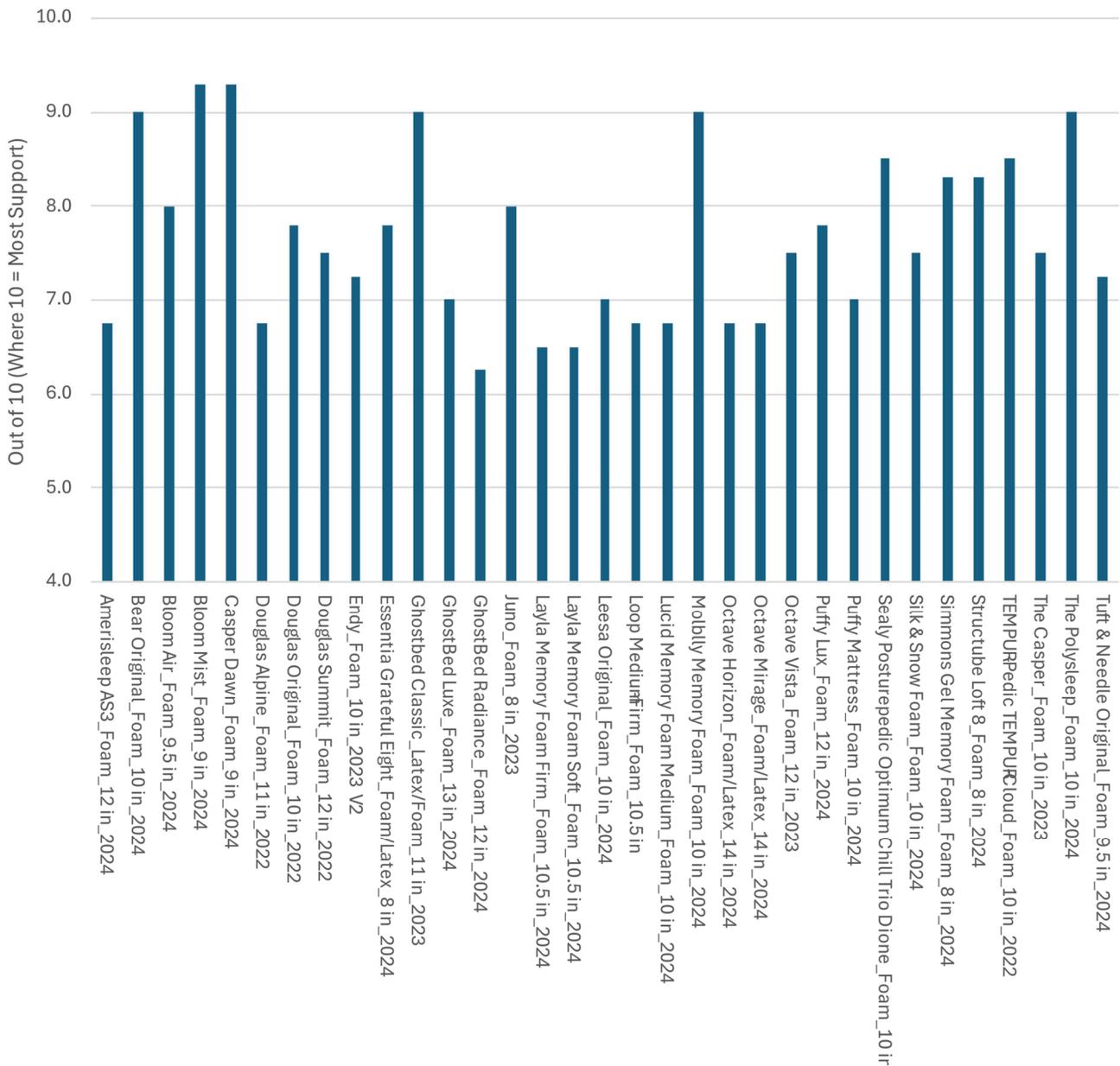
Mattress Name	D4 - Sinkage Front [Location 1] @ D2	D4 - Sinkage Front [Location 1] @ D3	D4 - Sinkage Side [Location 2] @D2	D4 - Sinkage Side [Location 2] @D3	Average Deflection	Out of 10
Amerisleep AS3_Foam_12 in_2024	4.6	5.3	5.6	6.3	5.5	6.8
Bear Original_Foam_10 in_2024	2.6	3.3	3.1	3.7	3.2	9.0
Bloom Air_Foam_9.5 in_2024	3.5	4.2	3.9	4.6	4.1	8.0
Bloom Mist_Foam_9 in_2024	2.2	2.9	2.9	3.4	2.9	9.3
Casper Dawn_Foam_9 in_2024	2.4	3.2	2.9	3.4	3.0	9.3
Douglas Alpine_Foam_11 in_2022	4.0	4.8	6.2	6.3	5.3	6.8
Douglas Original_Foam_10 in_2022	4.4	4.6	4.1	4.1	4.3	7.8
Douglas Summit_Foam_12 in_2022	3.4	4.3	5.3	5.9	4.7	7.5
Endy_Foam_10 in_2023 V2	4.7	5.5	4.3	5.0	4.9	7.3
Essentia Grateful Eight_Foam/Latex_8 in_2024	3.8	4.6	4.1	4.8	4.4	7.8
Ghostbed Classic_Latex/Foam_11 in_2023	2.8	3.4	3.4	2.5	3.0	9.0
GhostBed Luxe_Foam_13 in_2024	4.6	5.4	5.1	5.7	5.2	7.0
GhostBed Radiance_Foam_12 in_2024	5.9	6.5	5.3	6.1	5.9	6.3
Juno_Foam_8 in_2023	3.4	4.1	4.4	4.9	4.2	8.0
Layla Memory Foam Firm_Foam_10.5 in_2024	4.9	5.8	5.4	6.3	5.6	6.5
Layla Memory Foam Soft_Foam_10.5 in_2024	5.1	5.6	5.9	6.4	5.7	6.5
Leesa Original_Foam_10 in_2024	4.5	5.0	5.1	5.8	5.1	7.0
Loop Medium-Firm_Foam_10.5 in	4.4	5.1	5.8	6.5	5.4	6.8
Lucid Memory Foam Medium_Foam_10 in_2024	4.4	4.9	5.8	6.1	5.3	6.8
Molbly Memory Foam_Foam_10 in_2024	2.5	3.4	2.9	3.6	3.1	9.0
Octave Horizon_Foam/Latex_14 in_2024	5.0	5.8	5.1	5.7	5.4	6.8
Octave Mirage_Foam/Latex_14 in_2024	5.2	6.1	5.1	5.6	5.5	6.8
Octave Vista_Foam_12 in_2023	3.5	4.2	5.5	5.5	4.7	7.5
Puffy Lux_Foam_12 in_2024	3.7	4.5	4.3	5.1	4.4	7.8
Puffy Mattress_Foam_10 in_2024	4.5	4.8	5.1	5.9	5.1	7.0
Sealy Posturepedic Optimum Chill Trio Dione_Foam_10 in_2024	3.6	4.3	3.0	3.8	3.7	8.5
Silk & Snow Foam_Foam_10 in_2024	4.1	4.9	4.6	5.3	4.7	7.5
Simmons Gel Memory Foam_Foam_8 in_2024	3.3	4.1	3.9	4.6	4.0	8.3
Structube Loft 8_Foam_8 in_2024	3.5	4.2	3.4	4.0	3.8	8.3
TEMPUR-Pedic TEMPUR-Cloud_Foam_10 in_2022	2.5	3.1	4.2	4.9	3.7	8.5
The Casper_Foam_10 in_2023	4.5	4.8	4.2	4.6	4.6	7.5
The Polysleep_Foam_10 in_2024	2.6	3.2	3.1	3.6	3.2	9.0
Tuft & Needle Original_Foam_9.5 in_2024	4.7	5.5	4.6	5.3	5.0	7.3

**Edge Support - Deflection Measurements (in inches): Hybrid**

<b>Mattress Name</b>	<b>D4 - Sinkage Front [Location 1] @ D2</b>	<b>D4 - Sinkage Front [Location 1] @ D3</b>	<b>D4 - Sinkage Side [Location 2] @D2</b>	<b>D4 - Sinkage Side [Location 2] @D3</b>	<b>D4 - Sinkage Side [Location 3] @D2</b>	<b>D4 - Sinkage Side [Location 3] @D3</b>	<b>Average Deflection</b>	<b>Out of 10</b>
Casper Atlas_Hybrid_10 in_2024	3.9	4.7	4.4	5.1	4.0	4.8	4.5	7.8
Casper Nova_Hybrid_12 in_2023	5.1	5.4	5.6	6.1	5.3	6.1	5.6	6.5
Casper Snow_Hybrid_12 in_2024	5.4	6.3	5.3	6.0	4.8	5.6	5.5	6.5
Dormeo One_Hybrid_11 in_2024	2.3	3.1	2.9	3.5	2.1	2.9	2.8	9.3
DreamCloud Premier_Hybrid_14 in_2024	4.3	5.2	4.9	5.7	4.5	5.4	5.0	7.3
Emma Hybrid Comfort_Hybrid_13 in_2024	4.5	5.3	4.5	5.3	4.1	4.9	4.8	7.3
Endy-Hybrid_Hybrid_13 in_2023	5.4	5.8	6.0	6.6	6.3	6.3	6.1	6.0
GhostBed Fusion_Hybrid_11 in_2024	3.4	4.2	4.1	4.9	3.8	4.6	4.2	8.0
Helix Midnight_Hybrid_11.5 in_2024	3.8	4.5	3.1	3.8	3.1	3.8	3.7	8.5
Hush Graph-Iced Hybrid_Hybrid_12 in_2024	5.7	6.0	5.2	6.0	5.7	6.4	5.8	6.3
IKEA Valevag_Hybrid_9.5 in_2024	3.4	4.2	3.6	4.4	0.0	0.0	3.9	8.3
Kingsdown Passions Beckingham_Hybrid_14.5 in_2024	3.6	4.5	4.1	4.9	3.6	4.5	4.2	8.0
Kingsdown Studio Acton_Hybrid_10 in_2024	1.9	2.6	2.4	3.1	2.1	2.9	2.5	9.7
Kingsdown Silent Partner Fairhaven_Hybrid_14 in_2022	4.4	4.8	5.1	5.3	4.8	6.0	5.1	7.0
Logan & Cove Choice_Hybrid_12 in_06/2024	4.0	4.7	4.4	5.1	4.1	4.9	4.5	7.5
Logan & Cove Frontier_Hybrid_13 in_2024	4.0	4.8	4.9	5.5	4.4	5.2	4.8	7.3
Logan & Cove Pinnacle_Hybrid_15 in_2024	5.4	6.1	6.1	6.7	5.8	6.5	6.1	6.0
Purple Restore Hybrid Firm_Hybrid_11.5 in_2024	2.1	3.0	1.9	2.7	2.9	3.3	2.6	9.5
Original Hamuq Hybrid_Hybrid_13 in_2024	4.3	5.0	4.5	5.1	4.8	6.0	4.9	7.3
Saatva Classic Luxury Firm_Hybrid_11.5 in_2024	2.6	3.5	3.6	4.1	2.8	3.6	3.4	8.8
Sealy Posturepedic Hollycourt_Hybrid_14.25 in_2024	4.1	4.9	4.6	5.4	4.3	5.1	4.8	7.3
Serta iComfort Hybrid_Hybrid_14 in_2024	4.4	5.2	5.1	5.9	5.1	5.7	5.2	7.0
Serta Perfect Sleeper Elite Aero_Hybrid_10.5 in_2024	2.6	3.4	2.9	3.6	2.7	3.5	3.1	9.0
Serta Perfect Sleeper Elite Percevall_Hybrid_11.5 in_2024	1.7	2.6	2.8	3.5	2.4	3.2	2.7	9.5
Silk & Snow Hybrid_Hybrid_12 in_2024	4.6	5.4	5.1	5.9	4.9	5.6	5.3	6.8
Silk & Snow Organic Firm_Hybrid_10 in_2024	1.9	2.6	2.4	3.0	2.2	2.8	2.5	9.7
Silk & Snow Organic Medium_Hybrid_Firm_12 in_2024	3.6	4.4	4.0	4.6	3.8	4.3	4.1	8.0
Silk & Snow Organic Plush_Hybrid_14 in_2024	4.2	5.0	5.0	5.8	4.6	5.3	5.0	7.3
Simba 2500_Hybrid_12 in_2024	5.6	6.2	6.1	6.6	5.6	6.4	6.1	6.0
Spa Sensations_Innerspring_8 in_2024	3.4	4.0	3.9	4.4	4.1	4.7	4.1	8.0

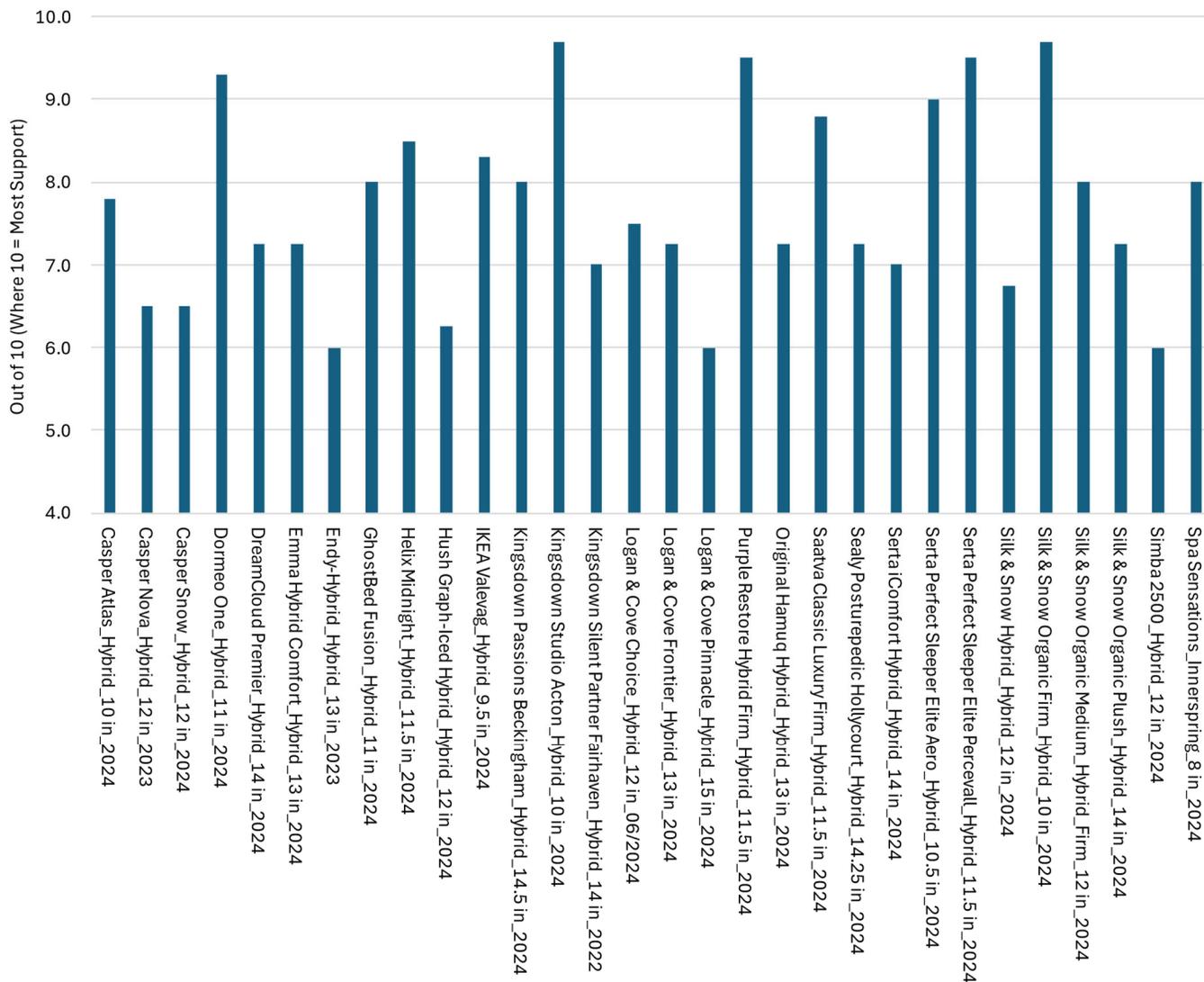


### Edge Support Out of 10: Foam & Foam/Latex





### Edge Support Out of 10: Hybrid





## MOTION ISOLATION TEST RESULTS

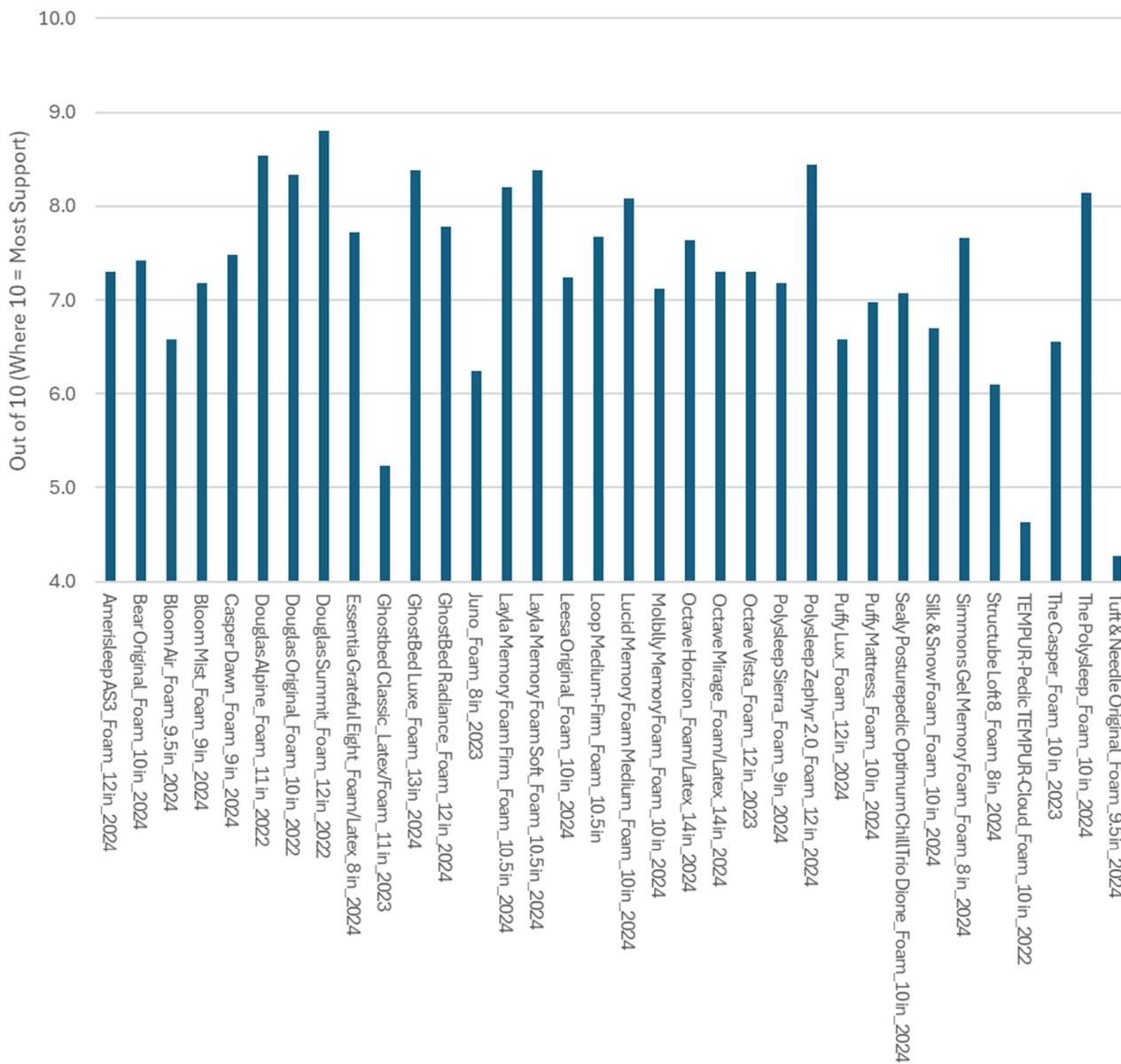
<b>Motion Isolation: Foam &amp; Foam/Latex</b>		
<b>Mattress</b>	<b>Average Peak Acceleration [g]</b>	<b>Out of 10</b>
Amerisleep AS3_Foam_12 in_2024	4.5	7.3
Bear Original_Foam_10 in_2024	4.3	7.4
Bloom Air_Foam_9.5 in_2024	5.7	6.6
Bloom Mist_Foam_9 in_2024	4.7	7.2
Casper Dawn_Foam_9 in_2024	4.2	7.5
Douglas Alpine_Foam_11 in_2022	2.4	8.5
Douglas Original_Foam_10 in_2022	2.8	8.3
Douglas Summit_Foam_12 in_2022	2.0	8.8
Essentia Grateful Eight_Foam/Latex_8 in_2024	3.8	7.7
Ghostbed Classic_Latex/Foam_11 in_2023	7.9	5.2
GhostBed Luxe_Foam_13 in_2024	2.7	8.4
GhostBed Radiance_Foam_12 in_2024	3.7	7.8
Juno_Foam_8 in_2023	6.3	6.2
Layla Memory Foam Firm_Foam_10.5 in_2024	3.0	8.2
Layla Memory Foam Soft_Foam_10.5 in_2024	2.7	8.4
Leesa Original_Foam_10 in_2024	4.6	7.2
Loop Medium-Firm_Foam_10.5 in	3.9	7.7
Lucid Memory Foam Medium_Foam_10 in_2024	3.2	8.1
Molbly Memory Foam_Foam_10 in_2024	4.8	7.1
Octave Horizon_Foam/Latex_14 in_2024	3.9	7.6
Octave Mirage_Foam/Latex_14 in_2024	4.5	7.3
Octave Vista_Foam_12 in_2023	4.5	7.3
Puffy Lux_Foam_12 in_2024	5.7	6.6
Puffy Mattress_Foam_10 in_2024	5.0	7.0
Sealy Posturepedic Optimum Chill Trio Dione_Foam_10 in_2024	4.9	7.1
Silk & Snow Foam_Foam_10 in_2024	5.5	6.7
Simmons Gel Memory Foam_Foam_8 in_2024	3.9	7.7
Structube Loft 8_Foam_8 in_2024	6.5	6.1
TEMPUR-Pedic TEMPUR-Cloud_Foam_10 in_2022	8.9	4.6
The Casper_Foam_10 in_2023	5.7	6.6
The Polysleep_Foam_10 in_2024	3.1	8.1
Tuft & Needle Original_Foam_9.5 in_2024	9.5	4.3

**Motion Isolation: Hybrid**

<b>Mattress</b>	<b>Average Peak Acceleration [g]</b>	<b>Out of 10</b>
Casper Atlas_Hybrid_10 in_2024	3.4	8.0
Casper Snow_Hybrid_12 in_2024	3.6	7.9
Dormeo One_Hybrid_11 in_2024	4.7	7.2
DreamCloud Premier_Hybrid_14 in_2024	4.0	7.6
Emma Hybrid Comfort_Hybrid_13 in_2024	5.5	6.7
Endy-Hybrid_Hybrid_13 in_2023	4.8	7.2
GhostBed Fusion_Hybrid_11 in_2024	4.2	7.5
Helix Midnight_Hybrid_11.5 in_2024	3.5	7.9
Hush Graph-Iced Hybrid_Hybrid_12 in_2024	3.3	8.0
IKEA Valevag_Hybrid_9.5 in_2024	4.4	7.4
Kingsdown Passions Beckingham_Hybrid_14.5 in_2024	4.3	7.4
Kingsdown Silent Partner Fairhaven_Hybrid_14 in_2022	7.8	5.3
Kingsdown Studio Acton_Hybrid_10 in_2024	4.9	7.1
Logan & Cove Choice_Hybrid_12 in_06/2024	4.1	7.5
Logan & Cove Frontier_Hybrid_13 in_2024	5.0	7.0
Logan & Cove Pinnacle_Hybrid_15 in_2024	7.5	5.5
Original Hamuq Hybrid_Hybrid_13 in_2024	3.3	8.0
Purple Restore Hybrid Firm_Hybrid_11.5 in_2024	4.2	7.5
Saatva Classic Luxury Firm_Hybrid_11.5 in_2024	6.0	6.4
Sealy Posturepedic Hollycourt_Hybrid_14.25 in_2024	6.5	6.1
Serta iComfort Hybrid_Hybrid_14 in_2024	3.8	7.7
Serta Perfect Sleeper Elite Aero_Hybrid_10.5 in_2024	5.7	6.6
Serta Perfect Sleeper Elite Percevall_Hybrid_11.5 in_2024	6.1	6.3
Silk & Snow Hybrid_Hybrid_12 in_2024	3.5	7.9
Silk & Snow Organic Firm_Hybrid_10 in_2024	4.4	7.4
Silk & Snow Organic Medium_Hybrid_Firm_12 in_2024	4.1	7.5
Silk & Snow Organic Plush_Hybrid_14 in_2024	4.3	7.4
Simba 2500_Hybrid_12 in_2024	3.9	7.7
Spa Sensations_Innerspring_8 in_2024	4.9	7.1

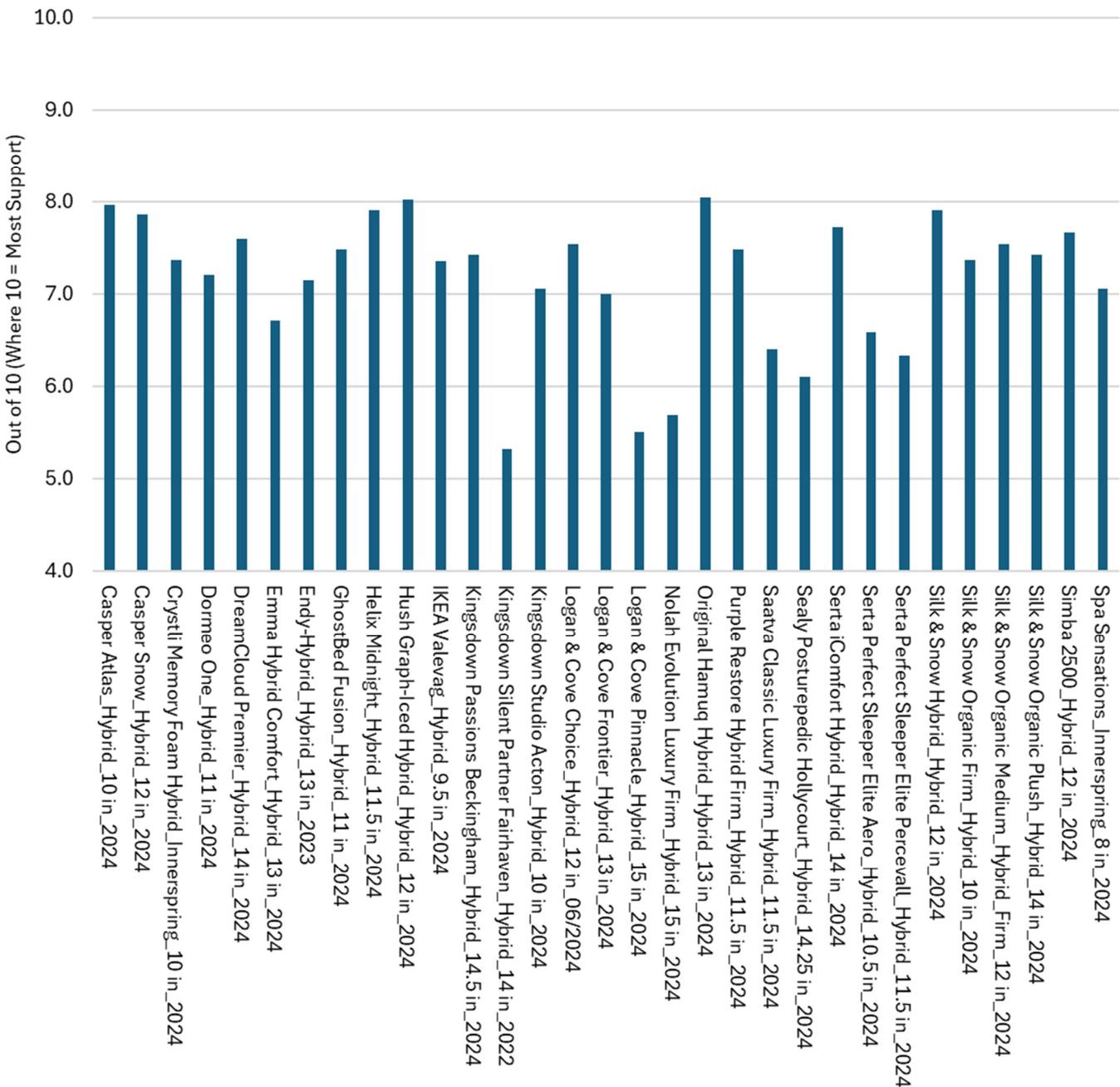


### Motion Isolation Out of 10: Foam & Foam/Latex





### Motion Isolation Out of 10: Hybrid





## REBOUND HEIGHT TEST RESULTS

### Bounciness: Foam & Foam/Latex

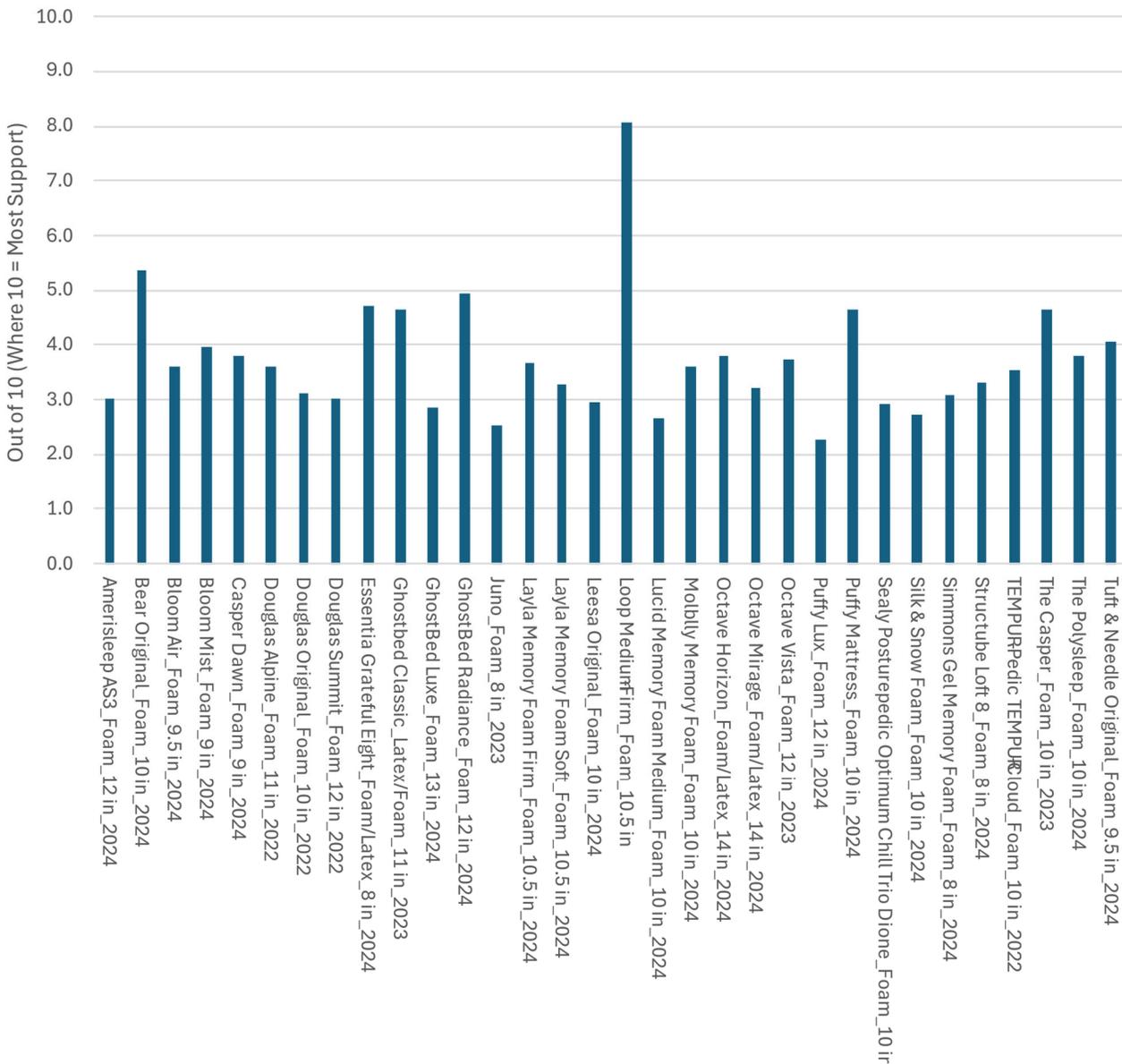
Mattress	Rebound Height Run 1, [in]	Rebound Height Run 2, [in]	Rebound Height Run 3, [in]	Rebound Height Average, [in]	Out of 10
Amerisleep AS3_Foam_12 in_2024	3.5	3.2	3.8	3.5	3.0
Bear Original_Foam_10 in_2024	7.5	7.8	7.2	7.5	5.4
Bloom Air_Foam_9.5 in_2024	4.5	4.8	4.2	4.5	3.6
Bloom Mist_Foam_9 in_2024	5.1	5.3	4.9	5.1	4.0
Casper Dawn_Foam_9 in_2024	4.8	4.6	5.0	4.8	3.8
Douglas Alpine_Foam_11 in_2022	4.5	4.3	4.7	4.5	3.6
Douglas Original_Foam_10 in_2022	3.8	3.8	3.5	3.7	3.1
Douglas Summit_Foam_12 in_2022	3.5	3.3	3.7	3.5	3.0
Essentia Grateful Eight_Foam/Latex_8 in_2024	6.4	6.6	6.2	6.4	4.7
Ghostbed Classic_Latex/Foam_11 in_2023	6.3	6.5	6.1	6.3	4.6
GhostBed Luxe_Foam_13 in_2024	3.2	3.4	3.0	3.2	2.9
GhostBed Radiance_Foam_12 in_2024	6.8	7.0	6.6	6.8	4.9
Juno_Foam_8 in_2023	2.6	2.6	2.6	2.6	2.5
Layla Memory Foam Firm_Foam_10.5 in_2024	4.5	4.5	4.8	4.6	3.7
Layla Memory Foam Soft_Foam_10.5 in_2024	4.0	3.8	4.0	3.9	3.3
Leesa Original_Foam_10 in_2024	3.3	3.5	3.4	3.4	3.0
Loop Medium-Firm_Foam_10.5 in	12.2	12.5	11.9	12.2	8.1
Lucid Memory Foam Medium_Foam_10 in_2024	2.5	3.0	3.0	2.8	2.6
Molbly Memory Foam_Foam_10 in_2024	4.5	4.8	4.2	4.5	3.6
Octave Horizon_Foam/Latex_14 in_2024	5.0	4.8	4.6	4.8	3.8
Octave Mirage_Foam/Latex_14 in_2024	3.8	3.6	4.0	3.8	3.2
Octave Vista_Foam_12 in_2023	4.7	4.5	4.9	4.7	3.7
Puffy Lux_Foam_12 in_2024	2.2	2.0	2.4	2.2	2.3
Puffy Mattress_Foam_10 in_2024	6.3	6.0	6.6	6.3	4.7
Sealy Posturepedic Optimum Chill Trio Dione_Foam_10 in_2024	3.3	3.6	3.0	3.3	2.9
Silk & Snow Foam_Foam_10 in_2024	3.0	3.3	2.7	3.0	2.7
Simmons Gel Memory Foam_Foam_8 in_2024	3.6	3.3	3.9	3.6	3.1
Structube Loft 8_Foam_8 in_2024	3.9	4.0	4.1	4.0	3.3
TEMPUR-Pedic TEMPUR-Cloud_Foam_10 in_2022	4.4	4.6	4.2	4.4	3.6
The Casper_Foam_10 in_2023	6.3	6.1	6.5	6.3	4.7
The Polysleep_Foam_10 in_2024	4.8	5.0	4.6	4.8	3.8
Tuft & Needle Original_Foam_9.5 in_2024	5.3	5.0	5.6	5.3	4.1

**Bounciness: Hybrid**

Mattress	Rebound	Rebound	Rebound	Rebound	Out of 10
	Height Run 1, [in]	Height Run 2, [in]	Height Run 3, [in]	Height Average, [in]	
Casper Atlas_Hybrid_10 in_2024	10.0	9.6	10.4	10.0	6.8
Casper Snow_Hybrid_12 in_2024	3.5	3.8	3.2	3.5	3.0
Dormeo One_Hybrid_11 in_2024	7.8	7.6	8.0	7.8	5.5
DreamCloud Premier_Hybrid_14 in_2024	7.3	7.5	7.1	7.3	5.2
Emma Hybrid Comfort_Hybrid_13 in_2024	7.2	6.9	7.5	7.2	5.2
Endy-Hybrid_Hybrid_13 in_2023	7.5	7.3	7.7	7.5	5.4
GhostBed Fusion_Hybrid_11 in_2024	8.7	8.4	9.0	8.7	6.1
Helix Midnight_Hybrid_11.5 in_2024	6.9	7.1	7.3	7.1	5.1
Hush Graph-Iced Hybrid_Hybrid_12 in_2024	5.4	5.3	5.3	5.3	4.1
IKEA Valevag_Hybrid_9.5 in_2024	3.0	3.3	2.7	3.0	2.7
Kingsdown Passions Beckingham_Hybrid_14.5 in_2024	8.0	8.1	7.9	8.0	5.6
Kingsdown Silent Partner Fairhaven_Hybrid_14 in_2022	8.8	9.0	8.6	8.8	6.1
Kingsdown Studio Acton_Hybrid_10 in_2024	13.3	13.6	13.0	13.3	8.7
Logan & Cove Choice_Hybrid_12 in_06/2024	8.2	8.0	8.4	8.2	5.8
Logan & Cove Frontier_Hybrid_13 in_2024	6.5	6.7	6.3	6.5	4.8
Logan & Cove Pinnacle_Hybrid_15 in_2024	7.3	7.0	6.7	7.0	5.1
Original Hamuq Hybrid_Hybrid_13 in_2024	9.4	9.6	9.2	9.4	6.5
Purple Restore Hybrid Firm_Hybrid_11.5 in_2024	12.0	11.8	11.6	11.8	7.8
Saatva Classic Luxury Firm_Hybrid_11.5 in_2024	12.6	12.9	12.3	12.6	8.3
Sealy Posturepedic Hollycourt_Hybrid_14.25 in_2024	10.2	10.0	10.4	10.2	6.9
Serta iComfort Hybrid_Hybrid_14 in_2024	8.3	8.1	7.9	8.1	5.7
Serta Perfect Sleeper Elite Aero_Hybrid_10.5 in_2024	13.0	12.5	13.5	13.0	8.5
Serta Perfect Sleeper Elite Percevall_Hybrid_11.5 in_2024	11.8	12.0	11.6	11.8	7.8
Silk & Snow Hybrid_Hybrid_12 in_2024	5.0	5.3	4.7	5.0	3.9
Silk & Snow Organic Firm_Hybrid_10 in_2024	11.5	12.0	11.0	11.5	7.7
Silk & Snow Organic Medium_Hybrid_Firm_12 in_2024	10.8	12.1	10.5	11.1	7.5
Silk & Snow Organic Plush_Hybrid_14 in_2024	6.5	6.8	6.2	6.5	4.8
Simba 2500_Hybrid_12 in_2024	5.0	5.3	4.7	5.0	3.9
Spa Sensations_Innerspring_8 in_2024	18.0	18.5	17.5	18.0	10.0



### Bounciness Out of 10: Foam & Foam/Latex





### Bounciness Out of 10: Hybrid

