



## Kenavon Drive, Reading

West Block W2 SAP Report – As Built

On behalf of **Berkeley Homes**

**Berkeley**  
Designed for life

Project Ref: 37454 | Rev: C01 | Date: September 2024

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## Document Control Sheet

**Project Name:** Kenavon Drive, Reading

**Project Ref:** 37454

**Report Title:** West Block As-Built SAP Report

**Date:** 04.09.2024

|                                         | Name           | Position         | Signature | Date                      |
|-----------------------------------------|----------------|------------------|-----------|---------------------------|
| <b>Prepared by:</b>                     | Darveer Sahans | Senior Associate | DS        | 4 <sup>th</sup> Sept 2024 |
| <b>Reviewed by:</b>                     | Jon West       | Consultant       | JW        | 4 <sup>th</sup> Sept 2024 |
| <b>Approved by:</b>                     |                |                  |           |                           |
| For and on behalf of Stantec UK Limited |                |                  |           |                           |

| Revision | Date       | Description           | Prepared | Reviewed | Approved |
|----------|------------|-----------------------|----------|----------|----------|
| C01      | 04.09.2024 | SAP Report – As Built | DS       | JW       |          |
|          |            |                       |          |          |          |
|          |            |                       |          |          |          |

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# 1 As Built – SAP calculations

## 1.1 Introduction

- 1.1.1 This report summaries the results of the As Built SAP calculations to demonstrate compliance with Part L1A Building Regulations 2013 (with 2016 amendments) and the planning requirements for Kenavon Drive, Reading.
- 1.1.2 The SAPs have been updated to the Architectural record drawings that was provided by PRP and we understand this incorporate all the BHOC changes to date.
- 1.1.3 This report should only be used for the purpose of discharging the planning conditions.
- 1.1.4 The SAPs were completed by a qualified SAP assessor and appended to this report are the As Built SAP block compliance report.

## 1.2 West Block W2 Compliance Results

- 1.2.1 Table 1 below shows the floor area weighted average Target Emissions Rate (TER), Dwellings Emissions Rate (DER), Target Fabric Energy Efficiency Rate (TFEE) and Dwellings Fabric Energy Efficiency (DFEE) for Kenavon Drive.

Table 1: Area weighted TER/ DER and TFEE/ DFEE results

| Stage                     | Weighted Average Results |
|---------------------------|--------------------------|
| Total Floor Area (sqm)    | 3116.20                  |
| Average TER/sqm           | 18.72                    |
| Average DER/sqm           | 14.21                    |
| Average TFEE/sqm          | 46.74                    |
| Average DFEE/sqm          | 37.41                    |
| Compliance                | Pass                     |
| % Improvement DER / TER   | 24.09                    |
| % Improvement DFEE / TFEE | 19.96                    |

## **Appendix A    SAP Block Compliance Report**

# Block Compliance WorkSheet: W2

## User Details

**Assessor Name:** Jon West  
**Software Name:** Stroma FSAP

**Stroma Number:** STRO005224  
**Software Version:** Version: 1.0.5.60

## Calculation Details

| Dwelling | DER   | TER   | DFEE | TFEE | TFA  |
|----------|-------|-------|------|------|------|
| 611      | 17.06 | 23.71 | 47.1 | 63.5 | 42.7 |
| 612      | 13.26 | 17.3  | 36.2 | 45.3 | 71.2 |
| 613      | 15.09 | 20.52 | 45.5 | 60.6 | 64.8 |
| 614      | 14.79 | 21    | 38.3 | 54.5 | 48   |
| 615      | 16.09 | 23.06 | 39.6 | 55.7 | 37.4 |
| 616      | 14.81 | 21.03 | 38.1 | 54.6 | 48   |
| 617      | 12.96 | 17.96 | 34.3 | 48.3 | 68.1 |
| 618      | 15.08 | 20.91 | 43.1 | 58.4 | 55.9 |
| 619      | 16.28 | 23.12 | 45.9 | 65.3 | 47.9 |
| 622      | 14.8  | 19.48 | 47.1 | 59.8 | 74.6 |
| 620      | 14.81 | 19.36 | 47.4 | 59.3 | 75.4 |
| 621      | 14.74 | 19.27 | 46.8 | 58.8 | 75.4 |
| 623      | 15.63 | 20.01 | 38.8 | 44.4 | 42.7 |
| 668      | 12.03 | 15.25 | 29.6 | 34.9 | 71.2 |
| 625      | 13.22 | 17.22 | 35.1 | 43.8 | 64.8 |
| 626      | 13.35 | 17.8  | 30.5 | 38.1 | 48   |
| 627      | 14.54 | 19.76 | 31   | 38.5 | 37.4 |
| 628      | 13.36 | 17.82 | 30.2 | 38.2 | 48   |
| 629      | 11.88 | 15.09 | 27.7 | 33.5 | 68.1 |
| 630      | 13.93 | 17.48 | 37.3 | 40.9 | 55.9 |
| 631      | 15.14 | 19.56 | 39.8 | 47.2 | 47.9 |
| 632      | 15.63 | 20.01 | 38.8 | 44.4 | 42.7 |
| 633      | 12.03 | 15.25 | 29.5 | 34.9 | 71.2 |
| 634      | 13.22 | 17.22 | 35   | 43.8 | 64.8 |
| 635      | 13.35 | 17.8  | 29.8 | 38.1 | 48   |
| 636      | 14.54 | 19.76 | 30.7 | 38.5 | 37.4 |

## Block Compliance WorkSheet: W2Cont...

| Dwelling | DER   | TER   | DFEE | TFEE | TFA  |
|----------|-------|-------|------|------|------|
| 637      | 13.36 | 17.82 | 30.2 | 38.2 | 48   |
| 638      | 12.6  | 16.04 | 32.1 | 39.2 | 68.1 |
| 639      | 13.93 | 17.48 | 37.1 | 40.9 | 55.9 |
| 640      | 15.14 | 19.56 | 39.5 | 47.2 | 47.9 |
| 641      | 15.82 | 20.45 | 39.6 | 46.7 | 42.7 |
| 642      | 12.03 | 15.25 | 29.5 | 34.9 | 71.2 |
| 643      | 13.22 | 17.22 | 35.2 | 43.8 | 64.8 |
| 644      | 13.35 | 17.8  | 30   | 38.1 | 48   |
| 645      | 14.54 | 19.76 | 30.3 | 38.5 | 37.4 |
| 646      | 13.36 | 17.82 | 30   | 38.2 | 48   |
| 647      | 12.51 | 15.63 | 31.8 | 36.7 | 68.1 |
| 648      | 13.93 | 17.48 | 37.2 | 40.9 | 55.9 |
| 649      | 15.14 | 19.56 | 39.6 | 47.2 | 47.9 |
| 650      | 15.63 | 20.01 | 38.8 | 44.4 | 42.7 |
| 651      | 12.03 | 15.25 | 29.8 | 34.9 | 71.2 |
| 652      | 13.75 | 17.9  | 38.1 | 47.2 | 64.8 |
| 653      | 13.39 | 17.9  | 31.2 | 38.7 | 48   |
| 654      | 14.54 | 19.76 | 31   | 38.5 | 37.4 |
| 655      | 14.02 | 18.7  | 34.2 | 42.7 | 48   |
| 656      | 12.78 | 16.21 | 33.7 | 39.8 | 68.1 |
| 657      | 13.93 | 17.61 | 37.2 | 41.6 | 55.9 |
| 658      | 15.14 | 19.56 | 39.8 | 47.2 | 47.9 |
| 659      | 17.31 | 22.87 | 46.5 | 59.2 | 42.7 |
| 660      | 13.94 | 18.62 | 39.5 | 52.1 | 71.2 |
| 661      | 15.51 | 21.18 | 45.7 | 62   | 60   |
| 662      | 15.66 | 21.22 | 41.4 | 55.6 | 48   |
| 667      | 16.13 | 21.81 | 38   | 49.3 | 37.4 |
| 663      | 16.14 | 21.94 | 43.3 | 57.5 | 45.1 |
| 664      | 15.94 | 20.29 | 50.2 | 59.2 | 62.6 |
| 665      | 16.19 | 21.28 | 48.5 | 60.4 | 55.9 |

## Block Compliance WorkSheet: W2Cont...

| Dwelling | DER  | TER  | DFEE | TFEE | TFA  |
|----------|------|------|------|------|------|
| 666      | 16.9 | 22.8 | 48.7 | 63.7 | 47.9 |

### Calculation Summary

|                         |         |
|-------------------------|---------|
| Total Floor Area        | 3116.20 |
| Average TER             | 18.72   |
| Average DER             | 14.21   |
| Average DFEE            | 37.41   |
| Average TFEE            | 46.74   |
| Compliance              | Pass    |
| % Improvement DER TER   | 24.09   |
| % Improvement DFEE TFEE | 19.96   |

## **Appendix B      SAP Key Results**

Appended are the key results showing the improvements for each dwelling.

| Dwelling | Reference | Certificate Date | Property Type | Address1 | Address2        | City    | Postcode | Country | DER         | TER   | DFEE | TFEE | Percent Improvement | Total Floor Area |
|----------|-----------|------------------|---------------|----------|-----------------|---------|----------|---------|-------------|-------|------|------|---------------------|------------------|
| 611      | W2-01-01  | 21/08/2024       | Flat          | Flat 12  | 2 Kenavon Drive | READING | RG1 3FW  | England | 17.05872454 | 23.71 | 47.1 | 63.5 | 28.05               | 42.7             |
| 612      | W2-01-02  | 21/08/2024       | Flat          | Flat 11  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.25731356 | 17.3  | 36.2 | 45.3 | 23.37               | 71.2             |
| 613      | W2-01-03  | 21/08/2024       | Flat          | Flat 10  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.09333199 | 20.52 | 45.5 | 60.6 | 26.45               | 64.8             |
| 614      | W2-01-04  | 21/08/2024       | Flat          | Flat 9   | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.79082761 | 21    | 38.3 | 54.5 | 29.57               | 48               |
| 615      | W2-01-05  | 21/08/2024       | Flat          | Flat 8   | 2 Kenavon Drive | READING | RG1 3FW  | England | 16.08522229 | 23.06 | 39.6 | 55.7 | 30.25               | 37.4             |
| 616      | W2-01-07  | 21/08/2024       | Flat          | Flat 7   | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.80777657 | 21.03 | 38.1 | 54.6 | 29.59               | 48               |
| 617      | W2-01-08  | 21/08/2024       | Flat          | Flat 6   | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.96193134 | 17.96 | 34.3 | 48.3 | 27.83               | 68.1             |
| 618      | W2-01-10  | 21/08/2024       | Flat          | Flat 2   | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.07648574 | 20.91 | 43.1 | 58.4 | 27.9                | 55.9             |
| 619      | W2-01-11  | 21/08/2024       | Flat          | Flat 1   | 2 Kenavon Drive | READING | RG1 3FW  | England | 16.27977317 | 23.12 | 45.9 | 65.3 | 29.59               | 47.9             |
| 622      | W2-01-12  | 21/08/2024       | Maisonette    | Flat 5   | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.80425485 | 19.48 | 47.1 | 59.8 | 24                  | 74.6             |
| 620      | W2-01-13  | 21/08/2024       | Maisonette    | Flat 4   | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.81222558 | 19.36 | 47.4 | 59.3 | 23.49               | 75.4             |
| 621      | W2-01-14  | 21/08/2024       | Maisonette    | Flat 3   | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.74284132 | 19.27 | 46.8 | 58.8 | 23.49               | 75.4             |
| 623      | W2-02-01  | 21/08/2024       | Flat          | Flat 22  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.63465842 | 20.01 | 38.8 | 44.4 | 21.87               | 42.7             |
| 668      | W2-02-02  | 21/08/2024       | Flat          | Flat 21  | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.03308692 | 15.25 | 29.6 | 34.9 | 21.09               | 71.2             |
| 625      | W2-02-03  | 21/08/2024       | Flat          | Flat 20  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.21917979 | 17.22 | 35.1 | 43.8 | 23.23               | 64.8             |
| 626      | W2-02-04  | 21/08/2024       | Flat          | Flat 19  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.34932549 | 17.8  | 30.5 | 38.1 | 25                  | 48               |
| 627      | W2-02-05  | 21/08/2024       | Flat          | Flat 18  | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.53671221 | 19.76 | 31   | 38.5 | 26.43               | 37.4             |
| 628      | W2-02-06  | 21/08/2024       | Flat          | Flat 17  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.360856   | 17.82 | 30.2 | 38.2 | 25.02               | 48               |
| 629      | W2-02-07  | 21/08/2024       | Flat          | Flat 16  | 2 Kenavon Drive | READING | RG1 3FW  | England | 11.88450323 | 15.09 | 27.7 | 33.5 | 21.24               | 68.1             |
| 630      | W2-02-08  | 21/08/2024       | Flat          | Flat 15  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.93112493 | 17.48 | 37.3 | 40.9 | 20.3                | 55.9             |
| 631      | W2-02-09  | 21/08/2024       | Flat          | Flat 14  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.13753193 | 19.56 | 39.8 | 47.2 | 22.61               | 47.9             |
| 632      | W2-03-01  | 21/08/2024       | Flat          | Flat 31  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.63465842 | 20.01 | 38.8 | 44.4 | 21.87               | 42.7             |
| 633      | W2-03-02  | 21/08/2024       | Flat          | Flat 30  | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.03308692 | 15.25 | 29.5 | 34.9 | 21.09               | 71.2             |
| 634      | W2-03-03  | 21/08/2024       | Flat          | Flat 29  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.21917979 | 17.22 | 35   | 43.8 | 23.23               | 64.8             |
| 635      | W2-03-04  | 21/08/2024       | Flat          | Flat 28  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.34932549 | 17.8  | 29.8 | 38.1 | 25                  | 48               |
| 636      | W2-03-05  | 21/08/2024       | Flat          | Flat 27  | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.53671221 | 19.76 | 30.7 | 38.5 | 26.43               | 37.4             |
| 637      | W2-03-06  | 21/08/2024       | Flat          | Flat 26  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.360856   | 17.82 | 30.2 | 38.2 | 25.02               | 48               |
| 638      | W2-03-07  | 21/08/2024       | Flat          | Flat 25  | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.59862481 | 16.04 | 32.1 | 39.2 | 21.45               | 68.1             |
| 639      | W2-03-08  | 21/08/2024       | Flat          | Flat 24  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.93112493 | 17.48 | 37.1 | 40.9 | 20.3                | 55.9             |
| 640      | W2-03-09  | 21/08/2024       | Flat          | Flat 23  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.13753193 | 19.56 | 39.5 | 47.2 | 22.61               | 47.9             |
| 641      | W2-04-01  | 21/08/2024       | Flat          | Flat 40  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.82468094 | 20.45 | 39.6 | 46.7 | 22.62               | 42.7             |
| 642      | W2-04-02  | 21/08/2024       | Flat          | Flat 39  | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.03308692 | 15.25 | 29.5 | 34.9 | 21.09               | 71.2             |
| 643      | W2-04-03  | 21/08/2024       | Flat          | Flat 38  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.21917979 | 17.22 | 35.2 | 43.8 | 23.23               | 64.8             |
| 644      | W2-04-04  | 21/08/2024       | Flat          | Flat 37  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.34932549 | 17.8  | 30   | 38.1 | 25                  | 48               |
| 645      | W2-04-05  | 21/08/2024       | Flat          | Flat 36  | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.53671221 | 19.76 | 30.3 | 38.5 | 26.43               | 37.4             |
| 646      | W2-04-06  | 21/08/2024       | Flat          | Flat 35  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.360856   | 17.82 | 30   | 38.2 | 25.02               | 48               |
| 647      | W2-04-07  | 21/08/2024       | Flat          | Flat 34  | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.51412821 | 15.63 | 31.8 | 36.7 | 19.94               | 68.1             |
| 648      | W2-04-08  | 21/08/2024       | Flat          | Flat 33  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.93112493 | 17.48 | 37.2 | 40.9 | 20.3                | 55.9             |
| 649      | W2-04-09  | 21/08/2024       | Flat          | Flat 32  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.13753193 | 19.56 | 39.6 | 47.2 | 22.61               | 47.9             |
| 650      | W2-05-01  | 21/08/2024       | Flat          | Flat 49  | 2 Kenavon Drive | READING | RG1 3FW  | England | 15.63465842 | 20.01 | 38.8 | 44.4 | 21.87               | 42.7             |
| 651      | W2-05-02  | 21/08/2024       | Flat          | Flat 48  | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.03308692 | 15.25 | 29.8 | 34.9 | 21.09               | 71.2             |
| 652      | W2-05-03  | 21/08/2024       | Flat          | Flat 47  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.74910091 | 17.9  | 38.1 | 47.2 | 23.19               | 64.8             |
| 653      | W2-05-04  | 21/08/2024       | Flat          | Flat 46  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.3928761  | 17.9  | 31.2 | 38.7 | 25.18               | 48               |
| 654      | W2-05-05  | 21/08/2024       | Flat          | Flat 45  | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.53671221 | 19.76 | 31   | 38.5 | 26.43               | 37.4             |
| 655      | W2-05-06  | 21/08/2024       | Flat          | Flat 44  | 2 Kenavon Drive | READING | RG1 3FW  | England | 14.01819613 | 18.7  | 34.2 | 42.7 | 25.04               | 48               |
| 656      | W2-05-07  | 21/08/2024       | Flat          | Flat 43  | 2 Kenavon Drive | READING | RG1 3FW  | England | 12.78304227 | 16.21 | 33.7 | 39.8 | 21.14               | 68.1             |
| 657      | W2-05-08  | 21/08/2024       | Flat          | Flat 42  | 2 Kenavon Drive | READING | RG1 3FW  | England | 13.93112493 | 17.61 | 37.2 | 41.6 | 20.89               | 55.9             |

|     |          |            |      |         |                 |         |         |         |             |       |      |      |       |      |
|-----|----------|------------|------|---------|-----------------|---------|---------|---------|-------------|-------|------|------|-------|------|
| 658 | W2-05-09 | 21/08/2024 | Flat | Flat 41 | 2 Kenavon Drive | READING | RG1 3FW | England | 15.13753193 | 19.56 | 39.8 | 47.2 | 22.61 | 47.9 |
| 659 | W2-06-01 | 21/08/2024 | Flat | Flat 58 | 2 Kenavon Drive | READING | RG1 3FW | England | 17.31346674 | 22.87 | 46.5 | 59.2 | 24.3  | 42.7 |
| 660 | W2-06-02 | 21/08/2024 | Flat | Flat 57 | 2 Kenavon Drive | READING | RG1 3FW | England | 13.93576265 | 18.62 | 39.5 | 52.1 | 25.16 | 71.2 |
| 661 | W2-06-03 | 21/08/2024 | Flat | Flat 56 | 2 Kenavon Drive | READING | RG1 3FW | England | 15.51427912 | 21.18 | 45.7 | 62   | 26.75 | 60   |
| 662 | W2-06-04 | 21/08/2024 | Flat | Flat 55 | 2 Kenavon Drive | READING | RG1 3FW | England | 15.65556528 | 21.22 | 41.4 | 55.6 | 26.22 | 48   |
| 667 | W2-06-05 | 21/08/2024 | Flat | Flat 54 | 2 Kenavon Drive | READING | RG1 3FW | England | 16.12898505 | 21.81 | 38   | 49.3 | 26.05 | 37.4 |
| 663 | W2-06-06 | 21/08/2024 | Flat | Flat 53 | 2 Kenavon Drive | READING | RG1 3FW | England | 16.14114764 | 21.94 | 43.3 | 57.5 | 26.43 | 45.1 |
| 664 | W2-06-07 | 21/08/2024 | Flat | Flat 52 | 2 Kenavon Drive | READING | RG1 3FW | England | 15.94196291 | 20.29 | 50.2 | 59.2 | 21.43 | 62.6 |
| 665 | W2-06-08 | 21/08/2024 | Flat | Flat 51 | 2 Kenavon Drive | READING | RG1 3FW | England | 16.18688483 | 21.28 | 48.5 | 60.4 | 23.93 | 55.9 |
| 666 | W2-06-09 | 21/08/2024 | Flat | Flat 50 | 2 Kenavon Drive | READING | RG1 3FW | England | 16.8996346  | 22.8  | 48.7 | 63.7 | 25.88 | 47.9 |

## Appendix C     Assessors accreditation details

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Jon West

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Assessor ID

STRO005224