

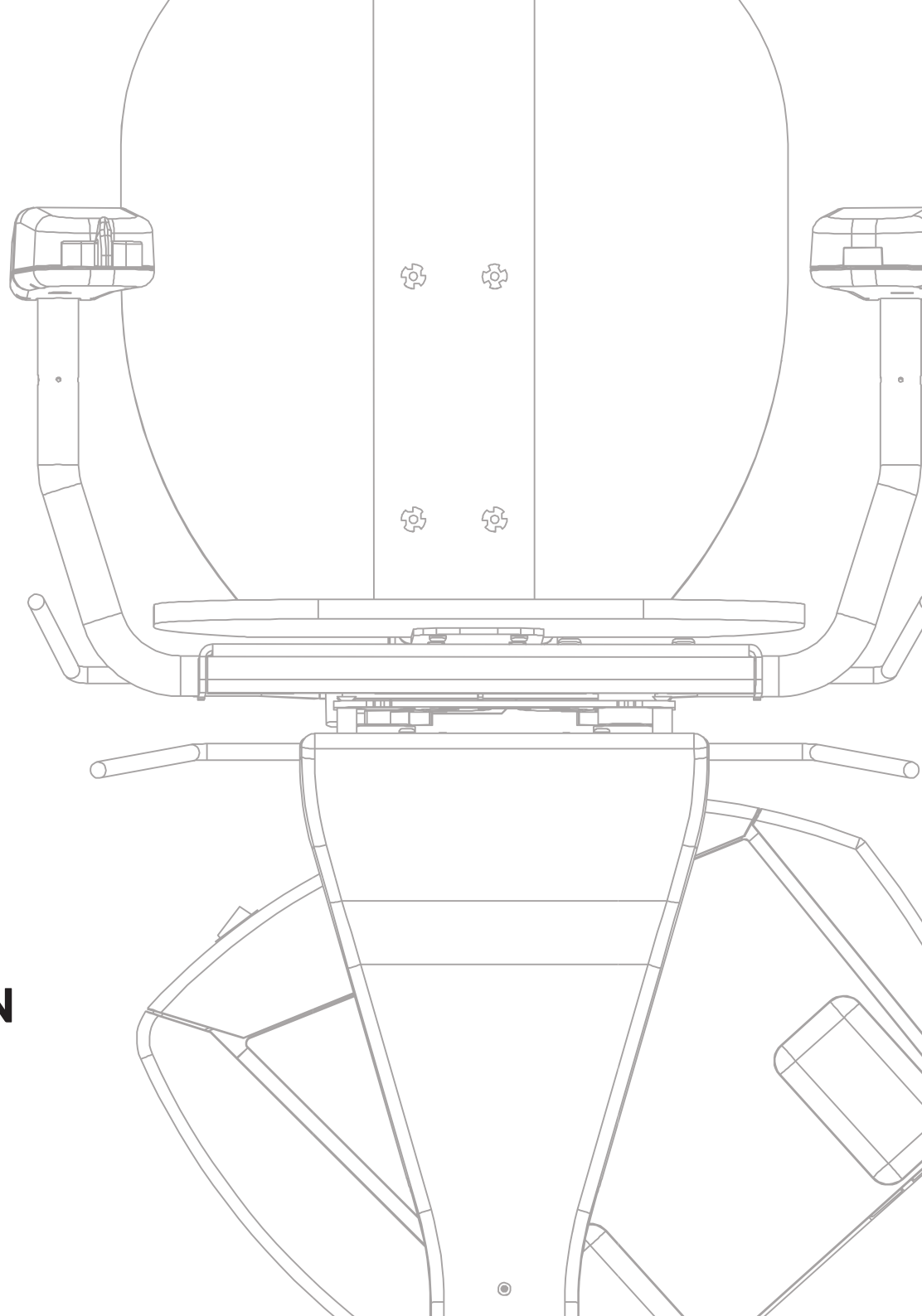


**BESPOKE**  
STAIRLIFTS LTD.

# **SYNERGY**

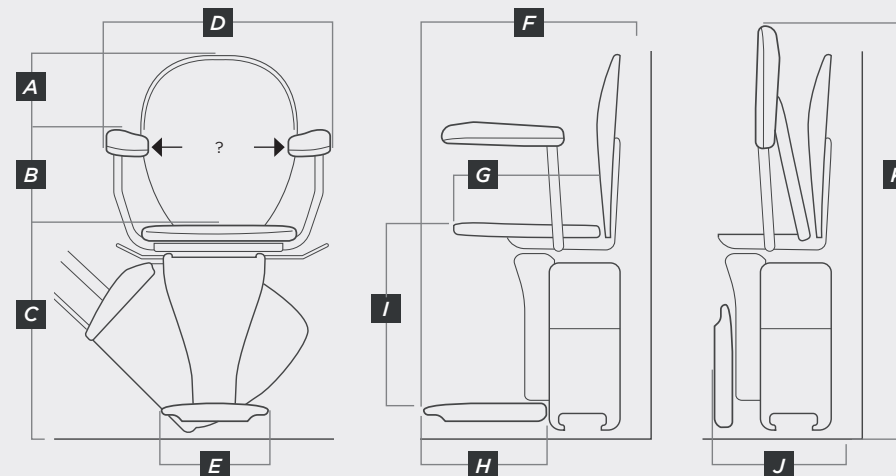
## **TECHNICAL INFORMATION**

April 2025





|          |                                    |       |
|----------|------------------------------------|-------|
| <b>A</b> | <b>Total height (from floor)</b>   | 970mm |
| <b>B</b> | <b>Height of arms (from floor)</b> | 750mm |
| <b>C</b> | <b>Seat height (from floor)</b>    | 530mm |
| <b>D</b> | <b>Total width</b>                 | 575mm |
| <b>E</b> | <b>Width of footrest</b>           | 252mm |
| <b>F</b> | <b>Total depth (from wall)</b>     | 565mm |
| <b>G</b> | <b>Seat depth (to backrest)</b>    | 380mm |
| <b>H</b> | <b>Depth of footrest</b>           | 315mm |
| <b>I</b> | <b>Footrest to seat</b>            | 451mm |
| <b>J</b> | <b>Total depth (folded)</b>        | 295mm |
| <b>K</b> | <b>Total height (folded)</b>       | 980mm |



## Product Overview

The Synergy Straight Stairlift is designed for straight staircases, providing a smooth and reliable mobility solution. It ensures user safety, comfort, and ease of use with advanced features and a simple installation process.

## OUTDOOR MODEL

### ADDITIONAL FEATURES

- IP55 Certified
- Conform loaded PCB????
- Zinc Plated Racking
- Rain Cover

### Key Features:

#### Straight Rail System

Custom-fitted to straight staircases

#### Battery-Powered

Operates during power outages

#### Remote-Controlled

Supplied with two remotes and wall-mounted holders

#### Safety Sensors

Detects obstacles to prevent accidents

#### Foldable Design

Seat, footrest, and armrests fold for space efficiency

#### Smooth Start & Stop Mechanism

Eliminates jerky movements

### Components & Inclusions:

- Synergy Carriage Unit
- Synergy Seat Unit
- Chassis Leg Assembly & Fixing Kit
- Remote Controls (x2) & Wall Holsters
- Battery Pack (2x 12V)
- Charger & Mounting Bracket
- Rail Sections

### Technical Specifications:

#### Power Supply

24V DC battery (2x 12V batteries)

#### Charging Input

Standard mains power via charger

#### Maximum Load Capacity

125 kg (275 lbs)

#### Speed

Approx. 0.12 m/s

#### Rail Type

Straight, aluminium construction

#### Operating Temperature Range

5°C to 40°C

### Safety Features:

- Safety Belt for User Restraint
- Obstacle Detection Sensors
- Manual Lowering Mechanism in Case of Emergency
- Keyed Operation to Prevent Unauthorised Use

### Maintenance & Troubleshooting:

#### Regular Cleaning

Keep the rail and seat free of dust and debris

#### Battery Replacement

Recommended every 2-3 years

#### Diagnostic Indicators

LED display for fault detection

#### Lubrication

Periodic application to moving parts for smooth operation

#### Professional Inspection

Annual servicing recommended

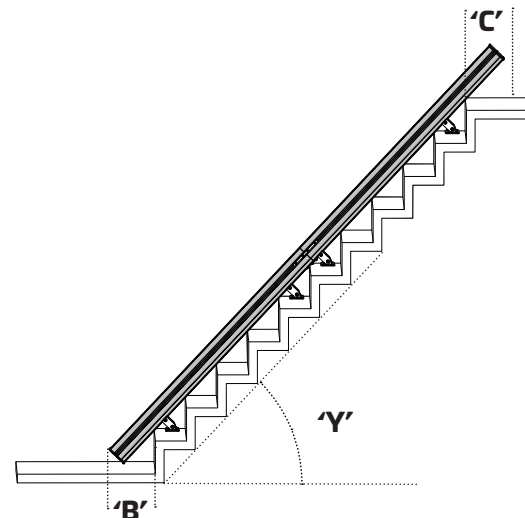
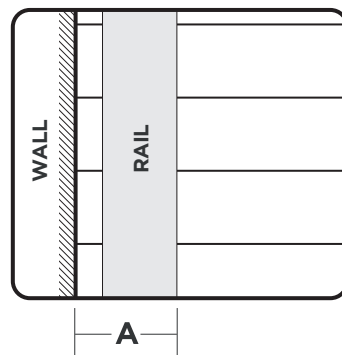
### Upgrade List:

- XL Rail (6750mm)
- Outdoor lift
- Powered Swivel
- Powered Hinge
- Seat Upholstery



## Rail positioning

A= 160mm min



## Top and bottom Synergy rail protrusions

| Y°  | B   | C   | Y°  | B   | C   | Y°  | B   | C   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 15° | 687 | 124 | 28° | 385 | 150 | 41° | 277 | 160 |
| 16° | 646 | 126 | 29° | 373 | 151 | 42° | 272 | 160 |
| 17° | 610 | 129 | 30° | 362 | 152 | 43° | 266 | 160 |
| 18° | 578 | 131 | 31° | 352 | 154 | 44° | 261 | 160 |
| 19° | 549 | 133 | 32° | 342 | 155 | 45° | 256 | 160 |
| 20° | 523 | 135 | 33° | 333 | 156 | 46° | 252 | 160 |
| 21° | 500 | 137 | 34° | 325 | 156 | 47° | 247 | 159 |
| 22° | 479 | 139 | 35° | 317 | 157 | 48° | 243 | 159 |
| 23° | 460 | 141 | 36° | 309 | 158 | 49° | 239 | 159 |
| 24° | 442 | 143 | 37° | 302 | 159 | 50° | 235 | 158 |
| 25° | 426 | 145 | 38° | 295 | 159 | 51° | 231 | 157 |
| 26° | 411 | 147 | 39° | 289 | 160 | 52° | 227 | 156 |
| 27° | 398 | 148 | 40° | 283 | 160 |     |     |     |

**Example:**  
38° Staircase requires  
295mm rail protrusion

**Power Supply:** Input 120v-240v  
Output 1.2Ah  
**Battery:** 2x 12v  
**Rail Drive:** Rack & Pinion  
**Max. seat rotation:** 80°  
**Max user weight:** 125kg (19.5 stone)

**Minimum required staircase width:**  
**640mm (or BTK+100)**  
SEE BTK CHART FOR GUIDANCE

**Minimum required parking space:**  
**FULL LIFT: 560mm**  
**RAIL ONLY: SEE CHART**

**Minimum stair angle:**  
15°

**Maximum stair angle:**  
52°

## MINIMUM STAIRCASE WIDTH (mm)

|     | 640 | 650 | 660 | 670 | 680 | 690 | 700 | 710 | 720 | 730 | 740 | 750 | 760 | 770 | 780 | 790 | 800 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 530 | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 540 | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 550 | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 560 | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 570 | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 580 | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 590 | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 600 | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 610 | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 620 | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 630 | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 640 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   | ✓   |
| 650 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   | ✓   |
| 660 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   | ✓   |
| 670 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   | ✓   |
| 680 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   | ✓   |
| 690 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   | ●   |
| 700 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | ●   |
| 710 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |
| 720 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |
| 730 | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |

● Further Assessment Required