

# KLP® RollCradle System 40 and 80

Flexible coil storage and transport systems



## **Original instructions**

This manual has been translated into multiple languages. The original manual is written in US English. All other language versions are translations of the original manual.

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## Disclaimer of liability

The manufacturer cannot be held responsible for personal injury, damage to the RollCradle System, or property damage caused by incorrect use, foreseeable misuse, or failure to follow the instructions in this manual. This also applies to unauthorized modifications of the RollCradle System and the use of non-approved parts or tools.

#### **Contact details**

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# INTRODUCTION

#### **About this document**

This document is an installation manual providing a set of guidelines to be followed during the installation and use of the RollCradle System.

This manual is intended for all personnel involved in installation, use and maintenance of the RollCradle System.

Only trained personnel who have thoroughly read and understood this manual should be involved in installing the RollCradle System.

This manual is designed to address most questions that may arise during the installation process. However, there may be areas that require further clarification. In such cases, we kindly ask the purchaser to contact the supplier for assistance. Please refer to the **Contact details**.

### **Technical drawings**

The technical drawings of the RollCradle System are available upon request in pdf-format. Please refer to the **Contact details**.

## **Regulatory information**

The RollCradle System has been designed and manufactured to meet all relevant safety and quality standards for industrial use. Additionally, the system is TÜV certified for the safe storage of steel coils up to a maximum of two levels high. However, it does not require CE marking because it falls outside the scope of the European Union's CE marking directives.

The RollCradle System is a passive component used as part of a coil storage solution. It is not classified as machinery or powered equipment, so it is not allowed to carry the CE marking.

Should further clarification be needed please contact us for additional documentation or guidance.

# Symbols used

Signal sign	Description
<b>▲</b> DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
<b>▲</b> WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
<b>▲</b> CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	Is used to address practices not related to physical injury.

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# 1 THE ROLLCRADLE SYSTEM 40 AND 80

#### 1.1 Intended use

The RollCradle System is intended for use in indoor storage areas. However, for outdoor applications, a Weather Resistant (WR) version is available, specifically designed to withstand exposure to external conditions.

The standard RollCradle System is suitable for storing coils with temperatures up to 60°C (140°F).

The RollCradle System is intended for use in environments where coils are stored and handled using appropriate lifting equipment, such as cranes or forklifts.

The RollCradle System should not be used for outdoor storage unless the WR version is specified, and it should only be used for cylindrical objects. Additionally, it must not exceed:

- a maximum load of 40 metric tons (~88,185 lbs) on two RollCradle RC40.
- a maximum load of 80 metric tons (~176,370 lbs) on two RollCradle RC80.

The system should be used within the coil dimension and weight limits as outlined in this manual or as calculated using the Coilstacker software.

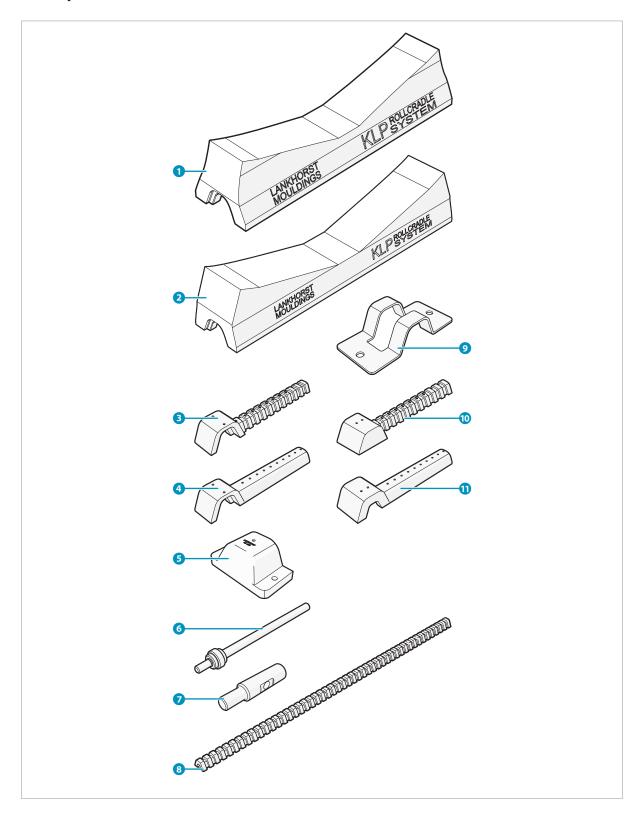
# 1.2 Reasonably foreseeable unintended use

The RollCradle System is not intended for:

- non-cylindrical objects.
- standing or walking on the system.
- applying dynamic loads exceeding 0.15 m/s (0.49 ft/s) speed.

# 2 ROLLCRADLE SYSTEM 40 AND 80 DESCRIPTION

# 2.1 Main parts



Product name	Article number	Description
1. RollCradle RC40	252581	-
2. RollCradle RC80	252582	_
<b>3.</b> Rail Spacer RSS40	252554	_
4. Tunnel Spacer RSS40	252555	_
5. Endcap RSS40	253132	_
6. Installation Tool RSS40	252556	_
7. Steel Connector RSS40	252553	Indoor
	252559	Weather Resistant
8. Rail RSS40	252552	Indoor
	252558	Weather Resistant
9. Mounting Bracket RSS40	512745	_
10. Rail End Spacer RSS40	252577	_
11. Tunnel End Spacer RSS40	252578	_

## 2.2 Main parts description

The RollCradle System 40 and 80 design consists mainly of the RollCradles RC40 and RC80 and the rail components.

#### **RollCradle RC40 and RC80**

The RollCradles RC40and RC80 are made from a polyolefin compound for durability and resistance to impact and abrasion.

Coils are placed onto the RollCradles, which cradle the coil securely and prevent rolling. The RollCradles can be added or removed to accommodate different coil dimensions and configurations.



#### Risk of improper functionality of the system

• Coils above 60°C (140°F) can compromise the integrity of the standard RollCradles. Ensure the coil temperature is below 60°C (140°F) to maintain product performance and prevent damage to the RollCradles.

#### **Tunnel and Rail Spacers**

The adjustable spacers maintain the correct distance between two parallel rails, customized based on the coil width. Positioned at intervals between rails, the spacers ensure proper alignment and maintain the intended distance between rails, critical for safely accommodating different coil widths. They also prevent lateral movement under load and during positioning/loading coils on the system.

#### **Endcap**

The Endcaps are installed to maintain the correct distance between the two parallel rails and ensure that RollCradles cannot be placed over the ends of the rails. The Endcaps are used when rails are floor-mounted.

#### Crushing hazard



Failure to use End Spacers (when the system is not floor-mounted) or Endcaps (when the system is floor-mounted) may result in a RollCradle being placed half on the rail, creating a potential safety hazard. Ensure that End Spacers or Endcaps are properly installed to prevent this condition.

#### **Tunnel and Rail End Spacers**

The End Spacers are installed to maintain the correct distance between the two parallel rails and ensure that RollCradles cannot be placed over the ends of the rails. The End Spacers are used when the rails are not floor-mounted.

#### **Crushing hazard**



Failure to use End Spacers (when the system is not floor-mounted) or Endcaps (when the system is floor-mounted) may result in a RollCradle being placed half on the rail, creating a potential safety hazard. Ensure that End Spacers or Endcaps are properly installed to prevent this condition.

#### Rail RSS40

The steel reinforced rails provide a solid foundation for the RollCradles. The rail segments are 4.04 m (13' 3") long. The segments can be connected to create a rail of any desired length. If needed, the first or last rail of the row can be cut to length using an iron saw or angle grinder. The rail segments can be mounted to the floor for additional stability.

The Rail RSS40 comes in two variants: the standard version and the Weather Resistant version.



**Risk of improper functionality of the system:** Never use the standard system outdoors. For outdoor use, request Weather Resistant components.

#### **Steel Connector**

The Steel Connector is used to link rail sections in the length direction securely, providing a continuous and stable track for the RollCradles. Connectors are designed with left and right screw threads for easy tightening.

The Steel Connector comes in two variants: the standard version and the Weather Resistant version.



**Risk of improper functionality of the system:** Never use the standard system outdoors. For outdoor use, request Weather Resistant components.

#### **Installation Tool**

The Installation Tool is a specialized tool provided with the system to help secure the Steel Connectors. The tool's ring ensures that connectors are tightened properly and within the right tolerances, and it is crucial for ensuring correct alignment between rail segments.

#### **Mounting Bracket**

The Mounting Bracket is used to mount the rail segments to the floor. The Mounting Brackets add stability, particularly for heavier coil stacks. The Mounting Brackets should be spaced evenly along the rail to prevent movement.

# 3 SAFETY

## 3.1 Personal protective equipment

Personnel that interact with the system must equip themselves with the following PPE:

Symbol	Description	When
	Wear protective glasses or goggles.	During installation.
Man San San San San San San San San San S	Wear protective gloves.	During installation.
	Wear protective shoes.	During installation.

#### 3.2 Residual risks

While the RollCradle System has been designed and engineered to minimise risks, some residual risks cannot be fully eliminated. Please carefully read and understand the following:

- **Slippage or Tripping Hazards:** The system may become slippery if wet or contaminated. Ensure that the surface is clean and dry during use.
- **Impact or Crush Hazards:** Improper installation or overloading can lead to material fatigue or failure. Adhere to all load limits and inspection schedules.
- **Material Degradation:** Over time, components may degrade due to weather or chemicals. Regularly inspect for any signs of damage or wear.
- **Sharp Edges:** Handle steel components with care and wear gloves to avoid injury from sharp edges or burrs.

These risks must be considered by the user, and all safety instructions must be followed. Contact the supplier for further assistance. Please refer to the **Contact details**.

## 3.3 Safety features

The End Spacers and Endcaps are a vital protection that reduces the risk of unintended RollCradle displacement, ensuring that coils remain within the defined storage area.

#### 3.4 Safety warnings and regulations

To maintain system integrity, carefully read all instructions and familiarize yourself with local safety procedures at the installation site. This document provides basic safety guidelines but may not cover all potential hazards.

# Risk of serious injury from improper installation Only trained personnel who have thoroughly read and understood this manual should install the RollCradle System 40 and 80. Risk of collapse and injury Exceeding the maximum load could result in equipment collapse and serious injury. Never exceed the maximum load of 40 metric tons (~88,185 lbs.) on two RollCradles RC40. **A** DANGER • Exceeding the maximum load could result in equipment collapse and serious injury. Never exceed the maximum load of 80 metric tons (~176,370 lbs.) on two RollCradles RC80. Improper stacking could result in death or serious injury. Always place the largest, heaviest, and widest coils at the bottom layer, and never stack more than two layers high. Incorrect rail connections may cause serious injury. Use only steel connectors provided by Lankhorst; self-made connectors compromise system safety. Never use self-made connectors. **Crushing hazard** Excessive overhang may destabilize coils. Ensure all coils rest fully on the RollCradle surface. For coils with a width up to 1950 mm (6' 43/4"), no more than 300 – 350 mm (12" – 14") overhang is allowed. For coils with a width over 1950 mm (6' 43/4"), center-to-center rail distance should always exceed half the coil width. See image ${\bf D}$ in Appendix II. Use of the system for unintended applications could result in death or **▲** WARNING serious injury. Always verify that the application is within the system's specifications. Never use the system for applications for which it is not Failure to use End Spacers (when the system is not floor-mounted) or Endcaps (when the system is floor-mounted) may result in a RollCradle being placed half on the rail, creating a potential safety hazard. Ensure that End Spacers or Endcaps are properly installed to prevent this

condition.

#### **Cutting hazard**

 Failure to handle with care may result in cuts or abrasions. Always wear cut-resistant gloves when handling the steel components to avoid injury.

#### Risk of improper functionality of the system

- Improper floor conditions may result in system damage or moderate injury. Ensure floor surfaces are level and strong enough, with a maximum slope of 0.5°. If there are any holes in the floor, fill the holes to prevent potential damage or instability.
- The first and or last rail segment in a row may be shortened. Shorter
  rail sections may compromise system stability and safety. Only use rail
  sections of at least 1 m (3' 3") in length to ensure secure and proper
  system operation.
- Incorrect coil positioning may lead to system damage or moderate injury. Ensure coils do not rest directly on the rail system and that the distance between RollCradles is correctly set.
- High crane speeds may damage the system. Ensure crane speed does not exceed 0.15 m/s (0.49 ft/s) when positioning coils to avoid excessive impact on the system.
- Coils above 60°C (140°F) can compromise the integrity of the standard RollCradles. Ensure the coil temperature is below 60°C (140°F) to maintain product performance and prevent damage to the RollCradles.
- Failure to maintain or inspect may result in system damage. Regularly inspect system components for damage or deformation, refer to 5.1
   Periodic maintenance.
- Never use the standard system outdoors. For outdoor use, request Weather Resistant components.
- Mounting Brackets must remain clear. Do not place any products over the Mounting Brackets.



# 4 INSTALLATION

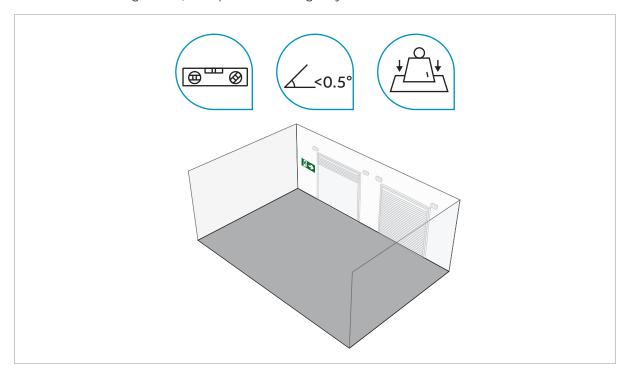
#### 4.1 Contents of the package

Check the contents of the packaging to ensure that all ordered components have been included. If any parts are missing or damaged, contact the supplier before proceeding.

# 4.2 Requirements for the location of installation

Before setting up the RollCradle System 40 and 80, it is mandatory to take the following rules into account:

- Make sure floor surfaces are levelled, and the floor construction is strong enough to bear the load of the coils.
- Make sure the floor is horizontal with a maximum descending surface of 0.5°.
- Make sure storage areas, transport and emergency routes are marked.



### 4.3 Determining the setup

<b>▲</b> DANGER	<ul> <li>Risk of collapse and injury</li> <li>Exceeding the maximum load could result in equipment collapse and serious injury. Never exceed the maximum load of 40 metric tons (~88,185 lbs.) on two RollCradles RC40.</li> <li>Exceeding the maximum load could result in equipment collapse and serious injury. Never exceed the maximum load of 80 metric tons (~176,370 lbs.) on two RollCradles RC80.</li> <li>Improper stacking could result in death or serious injury. Always place the largest, heaviest, and widest coils at the bottom layer, and never stack more than two layers high.</li> </ul>
<b>▲</b> WARNING	<ul> <li>Crushing hazard</li> <li>Excessive overhang may destabilize coils. Ensure all coils rest fully on the RollCradle surface. For coils with a width up to 1950 mm (6' 4<sup>3</sup>/<sub>4</sub>"), no more than 300 – 350 mm (12" – 14") overhang is allowed.</li> <li>For coils with a width over 1950 mm (6' 4<sup>3</sup>/<sub>4</sub>"), center-to-center rail distance should always exceed half the coil width. See image <b>D</b> in Appendix II.</li> </ul>
<b>▲</b> CAUTION	Risk of improper functionality of the system     Incorrect coil positioning may lead to system damage or moderate injury. Ensure coils do not rest directly on the rail system and that the distance between RollCradles is correctly set.

- 1. Measure the dimensions of the coils.
- 2. Determine using option A or B the setup of the RollCradle System 40 and 80 based on the coil amount, dimensions and weight.

#### Option A – Using the tables

Use the tables if the coils are of equal diameters and weights. The tables provide safe stacking arrangements. Refer to Appendix II for all allowable arrangements.

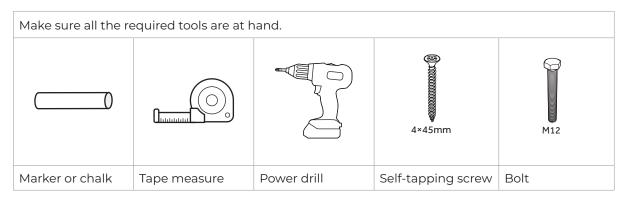
#### Option B - Using the Coilstacker software

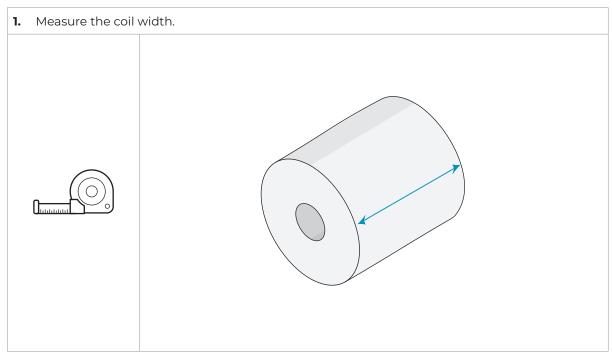
Use the Coilstacker software for coils of any diameter or weight. The software simulates the RollCradle System 40 and 80 and evaluates stacking safety based on your defined coil specifications. The software indicates the number of coils that can be stored per row. The software also provides additional information on your particular stacking arrangement (like reaction forces). Go to www.coilstacker.com.

General guidlines for safe stacking:

- Place the coil with the largest diameter on the bottom layer when the coils have different diameters.
- Place the heaviest coil on the bottom layer when the coils have different weights.
- Place the widest coil on the bottom layer when the coils have different widths.
- Use the Coilstacker software or consult your Lankhorst contact person when stacking coils
   >13 metric tons (28,660 lbs). Please refer to the Contact details.

## 4.4 Mounting the RollCradle System 40 and 80



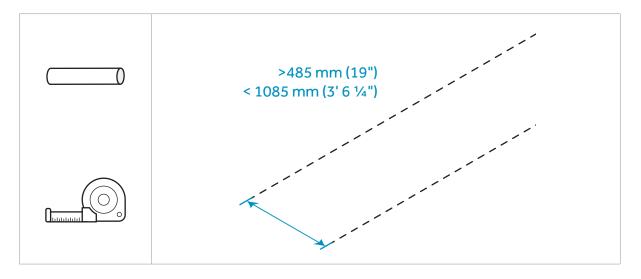


2. Mark the rail positions on the floor using chalk or a marker. Use a measuring tape to accurately place the marks.

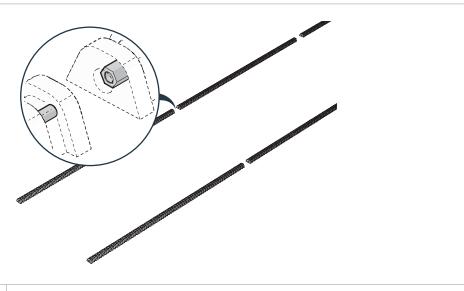
The distance required between the rails depends on the range of widths of the coils that are going to be stored.

- The distance can vary between a minimum of 485 mm (19") to a maximum of 1085 mm (3' 6 1/4").
- For coils with a width up to 1950 mm (6' 43%"), no more than 300 350 mm (12" 14") overhang is allowed.
- For coils with a width over 1950 mm (6' 4<sup>3</sup>/<sub>4</sub>"), center-to-center rail distance should always exceed half the coil width. See image **D** in Appendix II.

# NOTICE



**3.** Place the rails on the floor. Ensure the male connection of the rail faces the female connection of the following rail.



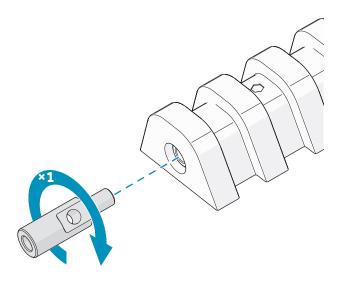
NOTICE

Cut the rails with an iron saw or an angled grinder when necessary.
Rail sections should always be at least 1 m (3' 3") in length. Cut rail sections may only be used at the beginning or end of a row and should adhere to the 1 m (3' 3") minimum length requirement. The unused end of a cut rail can be utilized to start the next row. This approach maintains system stability.

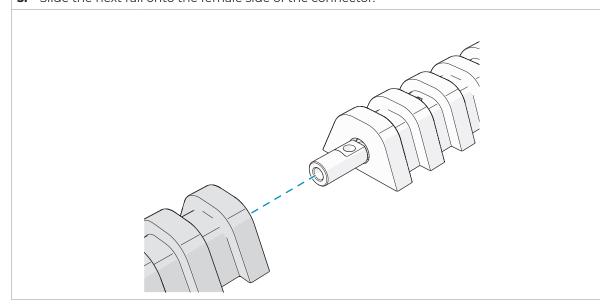
**4.** Insert the male side of the Steel Connector to the female side of the rail. Tighten the Steel Connector clockwise only one full turn.



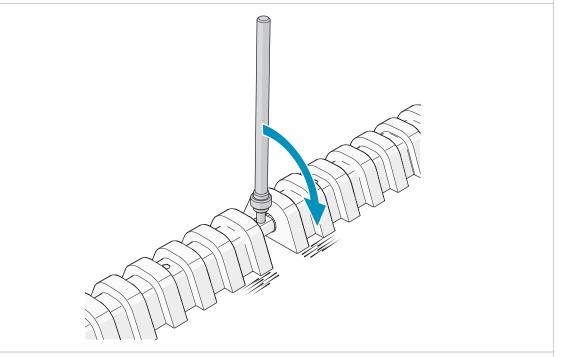
Ensure to tighten the Steel Connector only 1 turn for correct functioning of the system.



**5.** Slide the next rail onto the female side of the connector.







7. Continue tightening the Steel Connector until both rails are touching the ring of the Installation Tool and the hole of the Steel Connector is in the center of the gap. To test if the gap between the rails is acceptable, place a RollCradle over the connection. The RollCradle should fit without exerting any force.



- NOTICE
- Make sure the rails are parallel.
  - Make sure the tops of the rails are aligned along the same line.

- **8.** You have two options securing the system:
  - **Option A Not connected to the floor** This option uses the (Tunnel and Rail) Spacers and the (Tunnel and Rail) End Spacers.
  - **Option B Connected to the floor** This option uses the end caps and the Mounting Brackets.

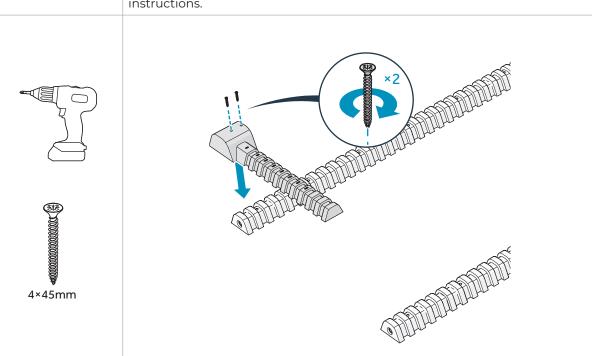
If you choose the *not connected to the floor* option, proceed with **Option A**. If you choose the *connected to the floor* option, proceed with **Option B**.

#### Option A: Securing the system using spacers.

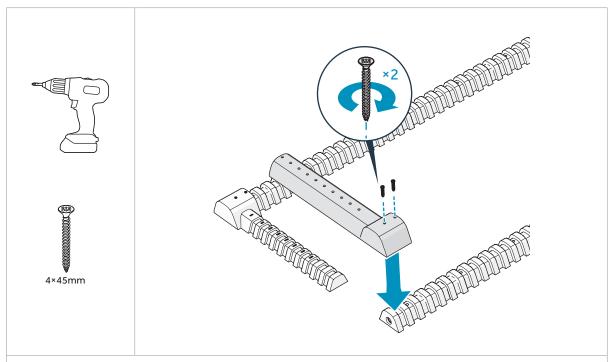
- a. Place the End Rail Spacer with the closed side facing outwards on the end of the rail.
- **b.** Fix the End Rail Spacer to the rail with two self-tapping screws.

#### NOTICE

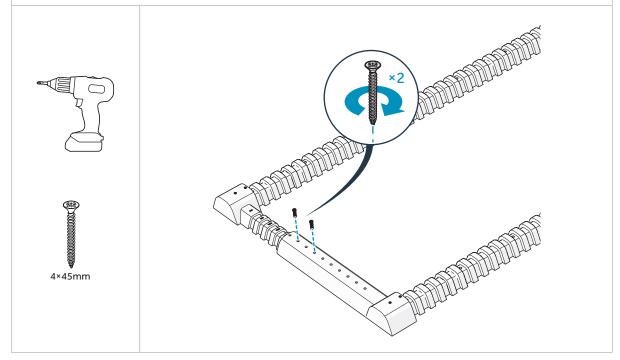
It is possible to cut the spacers if necessary. Never cut the spacers without checking if multiple stacking remains safe. Check Appendix III for instructions.



- **c.** Place the End Tunnel Spacer with the closed side facing outwards on the end of the rail that is to be coupled with the previous rail.
- **d.** Fix the End Tunnel Spacer to the rail with two self-tapping screws.



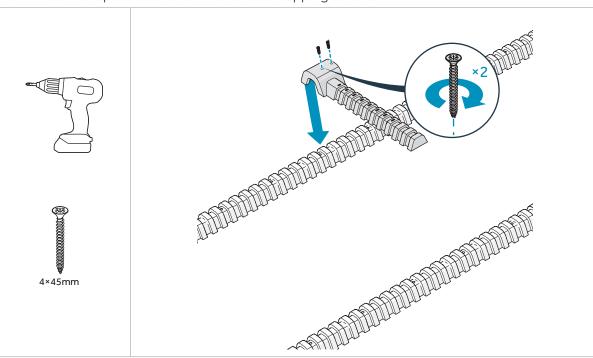
e. Fix the End Tunnel spacer to the End Rail Spacer with two self-tapping screws.



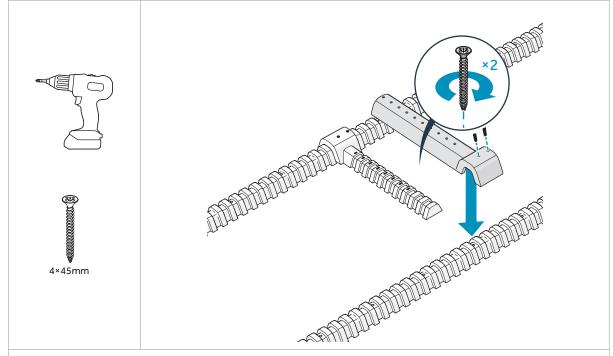
f. Place the RollCradles at the intervals decided, check chapter 4.3 Determining the setup. OR B Coilstacker Software g. Place the Rail and Tunnel Spacers at intervals no greater than 4.5 m (14'). 

≤4.5 m (14')

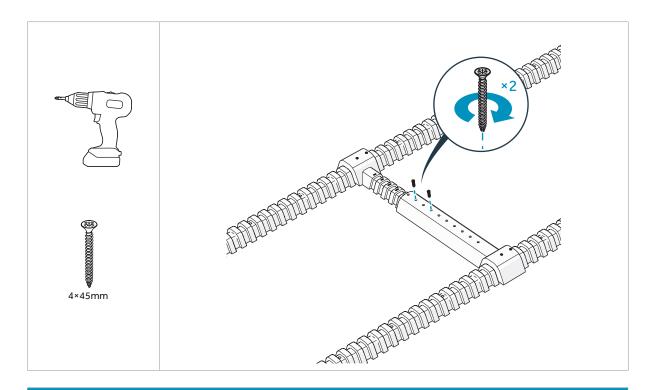




- i. Place the Tunnel Spacer on the other rail.
- **j.** Fix the Tunnel Spacer to the rail with two self-tapping screws.

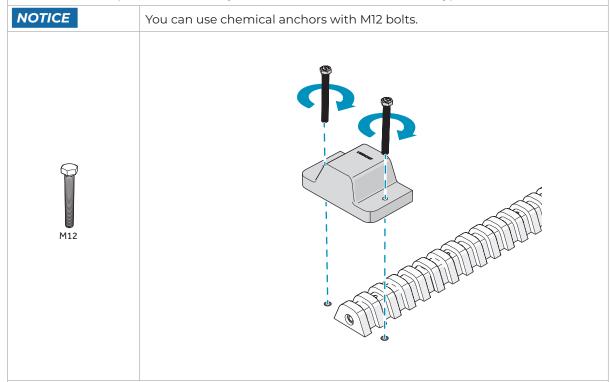


**k.** Fix the Tunnel Spacer to the Rail Spacer with two self-tapping screws.

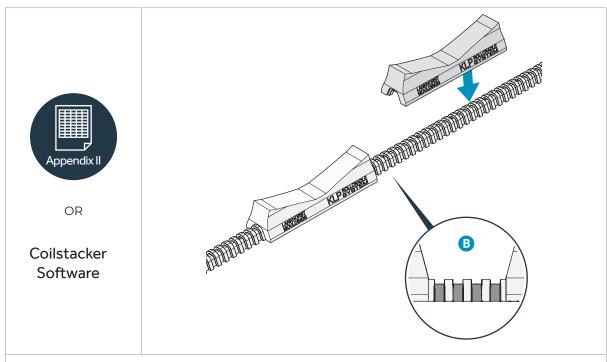


### Option B: Fastening the system to the floor.

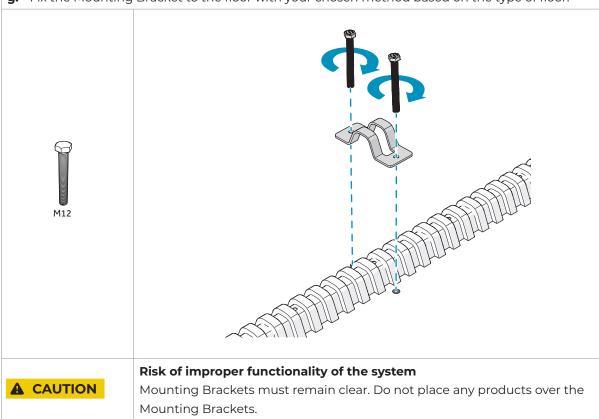
- **a.** Place the Endcap on the end of the rail.
- **b.** Mark the floor for drilling.
- **c.** Drill holes to the floor.
- **d.** Fix the Endcap to the floor with your chosen method based on the type of floor.



**e.** Place the RollCradles at the intervals decided, check chapter 4.3 Determining the setup.



- f. Place the Mounting Bracket at intervals no greater than 4.5 m (14').
- **g.** Fix the Mounting Bracket to the floor with your chosen method based on the type of floor.



# **5 MAINTENANCE**

# **▲** CAUTION

#### Risk of improper functionality of the system

Failure to maintain or inspect may result in system damage. Regularly inspect system components for damage or deformation, refer to **5.1 Periodic maintenance**.

#### 5.1 Periodic maintenance

Regular maintenance helps extend the system's service life and increases safety during operation. Use the maintenance schedule in this section and the instructions in this chapter to properly maintain the system.

Part	Maintenance activity	Frequency	Instructions
RollCradle Tunnel and Rail Spacer Tunnel and Rail	<ul> <li>Check for broken corners or edges.</li> <li>Check for cuts, cracks or tears on the surface.</li> <li>Check for permanent deformation</li> </ul>	Monthly	Replace the component if a defect is found.
End Spacer	that exceeds 10 mm (3/8") of the original geometry.  • Check for loose material fragments.		
Endcap	Check if the component fits on the rail without applying force.	When the setup is changed.	
Rail	<ul> <li>Check for broken corners or edges.</li> <li>Check for cuts, cracks or tears on the surface.</li> <li>Check for permanent deformation that exceeds 10 mm (3/8") of the original geometry.</li> <li>Check for loose material fragments.</li> <li>Check for corrosion.</li> </ul>	Monthly	
Steel Connector	<ul><li>Check for corrosion.</li><li>Check for cracks, tears and any visible deformation.</li></ul>	Monthly	
	<ul> <li>Check for broken thread.</li> <li>Check if a RollCradle fits over the gap with the steel connector without applying force.</li> </ul>	When the setup is changed.	
Mounting Bracket	<ul><li>Check for corrosion.</li><li>Check for cracks, tears and any visible deformation.</li></ul>	Monthly	

# 5.2 Spare parts

Only use parts produced by Lankhorst Engineered Products. The use of any other spare parts might compromise system safety.

#### 5.3 Changing the setup

The stacking setup can be adjusted after installation if needed. The RollCradles can be removed from the rail and relocated, provided they are undamaged. For any adjustments to RollCradle placement or coil application, it is essential to follow the stacking guidelines provided in chapter **4.3 Determining the setup** or use the Coilstacker software.

# 6 DISPOSAL



Separate and dispose the components of the system into the applicable waste streams based on their materials, in accordance with local regulations.

# 7 APPENDICES

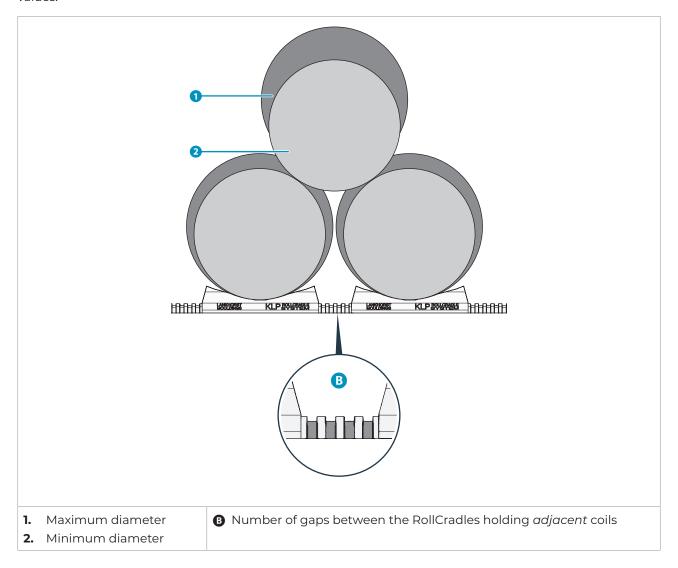
# Appendix I. General specifications

Article number	Product name	Dimensions (w×d×h)		Mass		Material
		mm	ft/in	kg	lbs.	
252581	RollCradle RSS40	800 × 195 × 184	2' 7 ½" × 7 5/8" × 7 1/4"	10.6	23 1/3	Polyolefin
252582	RollCradle RSS40	1020 × 195 × 184	3' 4" × 7 5/8" × 7	17.3	38 1/8	Polyolefin
252554	Rail Spacer RSS40	699 × 120 × 84	2' 3 ½" × 4 ¾" × 3 ¼"	1.8	4	Polyolefin
252555	Tunnel Spacer RSS40	683 × 120 × 84	2' 3" × 4 <sup>3</sup> / <sub>4</sub> " × 3	2.1	4 5/8	Polyolefin
253132	Endcap RSS40	145 × 251 × 93	5 <sup>3</sup> / <sub>4</sub> " × 9 <sup>7</sup> / <sub>8</sub> " × 3 <sup>5</sup> / <sub>8</sub> "	1.3	2 1/8	Polyolefin
252556	Installation Tool RSS40	_	_	0.5	1 1/8	Stainless steel
252553	Steel Connector RSS40	Ø 28 × 90	Ø 1 1/8" × 3 1/2"	0.3	2/3	Steel
252559	Steel Connector RSS40	Ø 28 × 90	Ø11/8"×31/2"	0.3	2/3	Zinc coated steel
252552	Rail RSS40	4021 × 113 × 64	13' 2 3/8" × 4 1/2" × 2 1/2"	25.1	55 1/4	Polyolefin/steel reinforced
252558	Rail RSS40	4021 × 113 × 64	13' 2 <sup>3</sup> / <sub>8</sub> " × 4 ½" × 2 ½"	25.1	55 1/4	Polyolefin / zinc coated steel reinforced
512745	Mounting Bracket RSS40	195 × 80 × 50	7 <sup>3</sup> / <sub>4</sub> " × 3 <sup>1</sup> / <sub>8</sub> " × 2"	0.6	1 1/3	Zinc coated steel
252577	Rail End Spacer RSS40	699 × 120 × 84	2' 3 ½" × 4 ¾" × 3 ¼"	1.9	4 3/16	Polyolefin
252578	Tunnel End Spacer RSS40	683 × 120 × 84	2' 3" × 4 <sup>3</sup> / <sub>4</sub> " × 3	2.2	4 7/8	Polyolefin

## Appendix II. Coil stacking tables for RollCradle System 40 and 80

This appendix contains all the possible settings for stacking coils using the RollCradle System 40 and 80. Each setting is different based on the number of gaps at position (a) and position (b). For each setting, the table shows the allowed minimum and maximum coil diameter, which applies to every layer.

Check **II.1** for the coil stacking tables with metric values and **II.2** for the coil stacking tables with imperial values.



# **II.1** Tables with metric values

Stacking table quick references for RC40 (Two level stacking)					
No. of gaps 🚯	Minimum diameter	Maximum diameter	Range		
	(mm)	(mm)	(mm)		
0	711	790	79		
1	759	844	85		
2	806	898	92		
3	854	952	98		
4	901	1006	105		
5	948	1060	112		
6	996	1114	118		
7	1043	1168	125		
8	1091	1222	131		
9	1138	1276	138		
10	1186	1330	144		
11	1233	1384	151		
12	1280	1438	158		
13	1328	1492	164		
14	1375	1546	171		
15	1423	1600	177		
16	1470	1654	184		
17	1517	1708	191		
18	1565	1762	197		
19	1612	1816	204		
20	1660	1870	210		
21	1707	1900	193		
22	1755	1900	145		
23	1802	1900	98		
24	1849	1900	51		
25	1897	1900	3		

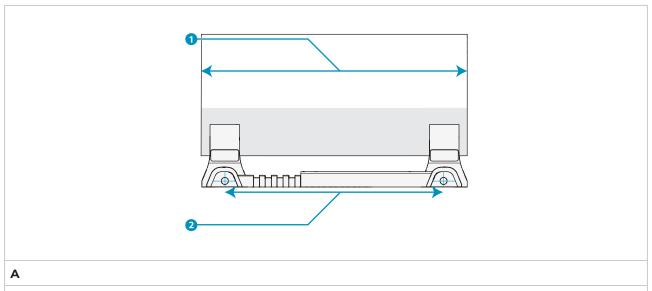
Stacking table quick references for RC80 (Two level stacking)					
No. of gaps 🚯	Minimum diameter	Maximum diameter	Range		
	(mm)	(mm)	(mm)		
0	901	1006	105		
1	948	1060	112		
2	996	1114	118		
3	1043	1168	125		
4	1091	1222	131		
5	1138	1276	138		
6	1186	1330	144		
7	1233	1384	151		
8	1280	1438	158		
9	1328	1492	164		
10	1375	1546	171		
11	1423	1600	177		
12	1470	1654	184		
13	1517	1708	191		
14	1565	1762	197		
15	1612	1816	204		
16	1660	1870	210		
17	1707	1924	217		
18	1755	1978	223		
19	1802	2032	230		
20	1849	2086	237		
21	1897	2140	243		
22	1944	2194	250		
23	1992	2248	256		
24	2039	2302	263		
25	2086	2356	270		
26	2134	2400	266		
27	2181	2400	219		
28	2229	2400	171		
29	2276	2400	124		
30	2324	2400	76		
31	2371	2400	29		

# II.2 Tables with imperial values

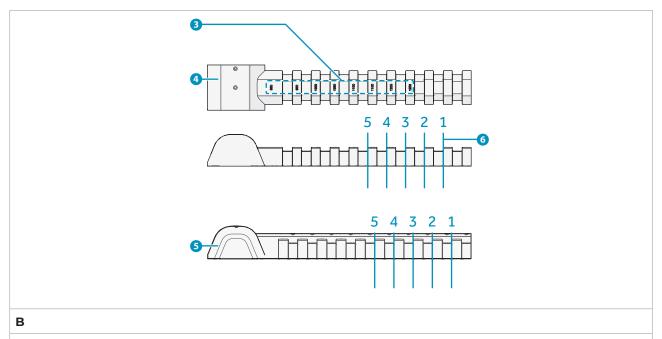
Stacking table quick references (Two level stacking)					
No. of gaps 🚯	Minimum diameter	Maximum diameter	Range		
	(ft/in)	(ft/in)	(ft/in)		
0	2' 4"	2'7 1/8"	3 1/8"		
1	2' 5 %"	2' 9 1/4"	3 3/8"		
2	2' 7 3/4"	2' 11 3/8"	3 5/8"		
3	2'9 %"	3'1 ½"	3 1/8"		
4	2'11 ½"	3' 3 %"	4 1/8"		
5	3'1 1/3"	3' 5 3/4"	4 1/9"		
6	3' 3 1/5"	3' 7 %"	4 5/8"		
7	3' 5 1/16"	3' 10"	4 15/16"		
8	3' 6 <sup>15</sup> / <sub>16</sub> "	4' 1/8"	5 1/5"		
9	3' 8 4/5"	4' 2 1/4"	5 4/9"		
10	3' 10 2/3"	4' 4 3/8"	5 2/3"		
11	4' 4/7"	4' 6 1/2"	5 15/16"		
12	4' 2 3/8"	4' 8 5/8"	6 1/4"		
13	4' 4 1/3"	4'10 3/4"	6 1/9"		
14	4'6 1/8"	5' 7/8"	6 3/4"		
15	4' 8"	5' 3"	6 15/16"		
16	4' 9 1/8"	5' 5 1/8"	7 1/4"		
17	4' ]] 3/4"	5' 7 1/4"	7 ½"		
18	5'1 5/8"	5' 9 3/8"	7 3/4"		
19	5' 3 4/9"	5' 11 1/2"	8 1/16"		
20	5' 5 3%"	6'1 5/8"	8 1/4"		
21	5' 7 1/5"	6' 2 4/5"	7 %"		
22	5' 9 1/8"	6' 2 4/5"	5 2/3"		
23	5'10 <sup>15</sup> / <sub>16</sub> "	6' 2 4/5"	3 1/8"		
24	6' 4/5"	6' 2 4/5"	2"		
25	6' 2 2/3"	6' 2 4/5"	1/8"		

Stacking table quick references (Two level stacking)					
No. of gaps <b>B</b>	Minimum diameter	Maximum diameter	Range		
	(ft/in)	(ft/in)	(ft/in)		
0	2' 11 ½"	3' 3 5/8"	4 1/8"		
1	3'1 1/3"	3' 5 3/4"	4 4/9"		
2	3' 3 1/5"	3' 7 %"	4 5/8"		
3	3' 5 1/16"	3' 10"	4 15/16"		
4	3' 6 <sup>15</sup> / <sub>16</sub> "	4' 1/8"	5 1/5"		
5	3' 8 4/5"	4' 2 1/4"	5 1/9"		
6	3' 10 3/3"	4' 4 3/8"	5 2/3"		
7	4' 4/7"	4' 6 1/2"	5 <sup>15</sup> / <sub>16</sub> "		
8	4' 2 3/8"	4' 8 5/8"	6 1/4"		
9	4' 4 1/3"	4'10 3/4"	6 4/9"		
10	4' 6 1/8"	5' 7/8"	6 3/4"		
11	4' 8"	5' 3"	6 15/16"		
12	4'9 %"	5' 5 1/8"	7 1/4"		
13	4' 11 3/4"	5'7 1/4"	7 ½"		
14	5'1 5/8"	5' 9 3/8"	7 3/4"		
15	5'3 %"	5' 11 ½"	8"		
16	5' 5 3/8"	6'1 5/8"	8 1/4"		
17	5' 7 ½"	6' 3 3/4"	8 4/7"		
18	5'9 1/8"	6' 5 %"	8 3/4"		
19	5' 10 <sup>15</sup> / <sub>16</sub> "	6' 8"	9"		
20	6' 4/5"	6' 10 1/8"	9 1/3"		
21	6' 2 3/3"	7' 1/4"	9 4/7"		
22	6' 4 4/7"	7' 2 3/8"	9 4/5"		
23	6' 6 1/9"	7' 4 ½"	10"		
24	6' 8 1/4"	7' 6 %"	10 3/8"		
25	6'10 1/8"	7' 8 3/4"	10 %"		
26	7'	7' 10 1/2"	10 1/2"		
27	7'1 %"	7'10 ½"	8 5/8"		
28	7' 3 3/4"	7'10 ½"	6 3/4"		
29	7' 5 %"	7'10 1/2"	4 7/8"		
30	7'7 1/2"	7'10 ½"	3"		
31	7' 9 3/8"	7'10 ½"	1 1/8"		

# Appendix III. Spacer cutting instructions



- 1. Coil width (CW)
- 2. Center-to-center distance (CTC)



- **3.** Rail Spacer markings (900 / 950 / 1000 / 1050 / 1150 / 1200 / 1250)
- 4. Rail Spacer
- 5. Tunnel Spacer
- **6.** Cutting points

Before cutting the spacers, ensure that stacking two layers remains safe and stable. This stability depends on factors such as the coil diameter-to-width ratio, floor condition, and coil handling practices.

Refer to the **table 1** to determine the appropriate center-to-center (CTC) **A2** distance between rails based on coil width (CW) **A1**:

- Column 1: Rail Spacer markings.
- **Column 2:** Corresponding center-to-center distance.
- **Column 3:** Minimum coil width for the RSS40 system.
- Column 4: Maximum coil width for the RSS40 system.

Table 1						
Rail spacer	стс		RSS40 min. CW		RSS40 max. CW	
marking	mm	ft/in	mm	ft/in	mm	ft/in
1250	1085	3' 6 2/3"	1210	3' 11 5/8"	1910	6' 3 1/5"
1200	1035	3' 4 3/4"	1160	3' 9 2/3"	1860	6'1 1/4"
1150	985	3' 2 3/4"	1110	3' 7 2/3"	1810	5' 11 1/4"
1100	935	3' 4/5"	1060	3' 5 3/4"	1760	5' 9 1/3"
1050	885	2'10 4/s"	1010	3' 3 3/4"	1710	5' 7 1/3"
1000	835	2' 8 %"	960	3'1 4/5"	1660	5' 5 3/8"
950	785	2' 6 1/8"	910	2' 11 4/5"	1570	5'1 1/5"
900	735	2' 4 15/16"	860	2' 9 1/8"	1470	4' 9 1/8"

For coil widths below 900 mm, cut the Tunnel Spacer and Rail Spacer at the cutting points **B**6. **Table 2** lists the minimum and maximum coil widths for this adjusted setup.

Table 2						
Cut at:	стс		RSS40 min. CW		RSS40 max. CW	
	mm	ft/in	mm	ft/in	mm	ft/in
1	685	2' 2 15/16"	810	2' 7 1/8"	1370	4' 5 <sup>15</sup> / <sub>16</sub> "
2	635	2' 1"	760	2' 5 15/16"	1270	4' 2"
3	585	יון ין"	710	2' 3 15/16"	1170	3' 10"
4	535	1' 9"	660	2' 2"	1070	3' 6 1/8"
5	485	1'7 1/8"	610	2'	970	3' 2 1/5"

EN – original instructions V01 | 11/20/25











